1	IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA
2	ATLANTA DIVISION
3	
4	DONNA CURLING, ET AL., :
5	PLAINTIFFS, : DOCKET NUMBER
6	vs. : DOCKET NUMBER : 1:17-CV-2989-AT
7	BRAD RAFFENSPERGER, ET AL., :
8	DEFENDANTS. :
9	
10	TRANSCRIPT OF STATUS CONFERENCE PROCEEDINGS
11	BEFORE THE HONORABLE AMY TOTENBERG
12	UNITED STATES DISTRICT JUDGE
13	MARCH 6, 2020
14	2:05 P.M.
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21	MECHANICAL STENOGRAPHY OF PROCEEDINGS AND COMPUTER-AIDED
22	TRANSCRIPT PRODUCED BY:
23	
24	OFFICIAL COURT REPORTER: SHANNON R. WELCH, RMR, CRR 2394 UNITED STATES COURTHOUSE
25	75 TED TURNER DRIVE, SOUTHWEST ATLANTA, GEORGIA 30303 (404) 215-1383

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1 PROCEEDINGS 2 (Atlanta, Fulton County, Georgia; March 6, 2020.) 3 THE COURT: Good afternoon. Please have a seat. 4 Counsel, how is our technology going? Can you hear 5 me? 6 MR. McGUIRE: I can. Yeah. It is quiet. 7 THE COURT: All right. I'm just looking to see if 8 there is anyone I don't know here present. I don't see anyone. 9 But if counsel -- I'm not sure I know the gentleman on the far end of the table with the state. 10 11 MR. TYSON: Yes, Your Honor. This is Ryan Germany. He is general counsel for the Secretary of State's office. 12 13 THE COURT: Great. I'm sure you have been around 14 then, and I just didn't eyeball you closely enough before. 15 Excuse me. 16 MR. TYSON: And as far as other new attorneys for our 17 side, Loree Anne Paradise is entering the case as well shortly. 18 So she's joined Taylor English, and she will be joining us in 19 this case as well. I think everybody else has been here 20 before. THE COURT: All right. I don't see anyone new over 21 22 on this side of the room. But if there is, somebody should 23 introduce themselves. 24 MR. KASTORF: Your Honor, this is Kirk Kastorf. I'm 25 not sure you will recognize my name. I am a counsel in the

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1
     Fair Fight case in front of Judge Jones. We had had a lawyer
 2
     who was planning on observing the hearing today, and she had a
     sudden emergency. So I am on my way to the courthouse now.
 3
 4
    But I was wondering if under the circumstances I might be able
 5
     to just listen by mute on the phone line instead.
 6
               THE COURT: As long as it doesn't screw up the
 7
     transmission to the people who are on the case actually.
 8
               Is everyone here who is trying to participate by
 9
    phone able to hear? And I don't know who all those people are.
     So maybe we could do a little roll call of who is on the phone.
10
11
               DR. COOMER: Yeah. I can start. This is Dr. Eric
     Coomer from Dominion Voting Systems. I'm on the call and can
12
13
    hear.
14
               THE COURT:
                           Thank you, Dr. Coomer.
15
               MR. FRONTERA:
                              This is Mike Frontera, general counsel
     for Dominion Voting Systems. And I also can hear great.
16
17
               THE COURT: Great.
18
               DR. HALDERMAN: This is Alex Halderman, expert for
19
     the plaintiffs. And I can also hear just fine.
20
               DR. GILBERT: This is --
21
               THE COURT: I'm sorry. Who was next?
22
               DR. GILBERT:
                             This is Juan Gilbert, and I can hear
23
     fine.
24
                           That was Mr. Gilbert -- Juan Gilbert.
               THE COURT:
25
               If you are speaking -- I'm sorry. Just one second.
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1
     I just want to say: I realize people may be on speakerphones.
 2
     But when you actually talk with us, if you end up talking, be
     sure to pick up the phone.
 3
 4
               All right. Go ahead.
 5
               MS. PRICE:
                           I'm Donna Price, and I'm a plaintiff in
 6
     Curling vs. Raffensperger.
 7
               THE COURT:
                           That is Donna Price, who is a plaintiff
 8
     in the Curling case.
 9
               Thank you, Ms. Price.
10
               Anyone else?
11
               DR. STARK:
                           Philip Stark, expert for the plaintiffs.
12
               THE COURT:
                           That is Dr. Stark, who is an expert for
13
     the plaintiffs. We'll get you his first name.
14
               Anyone else?
15
               All right. And Mr. McGuire is participating via
16
    video hookup.
17
               And you are in Seattle; is that right?
18
               MR. McGUIRE: Yes. Near Seattle.
19
               THE COURT: And you are healthy?
20
               MR. McGUIRE: For now.
21
               THE COURT: Well, good luck.
22
               MR. McGUIRE:
                             Thank you.
23
               THE COURT: All right. I appreciate the state's
24
     submission, and the Coalition also had a filing in advance.
25
    And thank you for that.
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Let me just say briefly: With respect to the defendants' expressed concerns about the hearing being held and the Court's questioning, obviously I think there's sufficient colorable grounds at least at this juncture for me to believe that the Court has jurisdiction. I will be addressing this and kind of absolutely making a final conclusion in the order to be issued on the motion to dismiss. And I expect that to be issued sometime in the next ten days.

But, obviously, as well the motion for preliminary injunction has been pending, and I'm trying to get that out at the same time. And there just was no point in my not trying to understand the questions that I had after reviewing the defendants' responses -- response to the motion for preliminary injunction.

And the questions are based on the materials that the government has provided. And, obviously, these are issues I follow that are in the -- not just simply only informed by what I read in the materials. But I do know there have been developments. And you have provided information regarding developments.

And so I'm just trying to understand the entire picture. And it is a new one. So it really is necessary for me to be able to fully evaluate what defendants' position is as to why -- just on the merits, if I get to the merits, why from the defendants' perspective I should not grant relief.

1 So the purpose of the hearing is penultimately for me 2 to really understand what is going on and the essence of the issues that relate to the audits. I realize the government 3 4 views it as, well, that is really just fine-tuning or I shouldn't -- it is perhaps not my business. But I think it is 5 6 part -- a central part of the conversation in these briefs in 7 some ways in terms of also the accuracy, reliability of the 8 system, and why I should or should not in any way intervene. 9 So that's -- so I had really a very basic question of -- for the state's counsel about the statute itself and how 10 11 you are reading it so I can understand. This deals with OCGA I don't know if you have a copy of the statute with 12 13 you or you can access it. We can go print a copy right now if 14 you want. 15 MR. TYSON: We were pulling it up at the moment or we 16 can pull a copy. 17 THE COURT: Whatever is better for you. 18 MR. TYSON: Probably a printed copy would be easier. 19 THE COURT: Holly, would you want to do that? 20 LAW CLERK COLE: I'm pulling up Westlaw, and I can 21 print it. 22 THE COURT: Nate says he will go get it if you send 23 it to the printer. 24 This is a section -- I'll wait so you are just not 25 doing two things at once.

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1
               LAW CLERK COLE: Should we maybe go check out the
 2
    book in the library? And they can have the entire section.
 3
               THE COURT: I don't have mine up. So I have the
 4
    book.
 5
               You mean go over to the --
               LAW CLERK COLE: I could get the code book from the
 6
 7
     library.
 8
               THE COURT:
                           Sure. Do you have the full code there?
 9
               MR. RUSSO:
                           Yes, ma'am.
10
                           We're good now, Your Honor.
               MR. TYSON:
11
               THE COURT:
                           Okay. And have plaintiffs' counsel been
12
     able to pull up the section?
13
               MR. BROWN:
                          We can get it.
14
               THE COURT: Are you all right?
15
                           We're working on it. We'll get there.
               MR. CROSS:
16
               THE COURT:
                           Do you want to wait until we have it --
17
    have a copy for you? Do you want Ms. Cole to go over to the
18
     library to get you a copy of the statute, OCGA 21-2-374?
19
               Have you printed it?
20
               LAW CLERK COLE: I did.
21
               MR. CROSS: We have it, Your Honor.
22
               THE COURT:
                           Okay.
                                  So midway down the paragraph, it
23
     says -- we're talking about, I think, getting -- running the
24
     election and getting -- the superintendent is getting
25
    everything in order beforehand. And -- and there are tests
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that are being run at that point.

The test -- and it says about a third or a half down, the test shall be conducted by processing a preaudited group of ballots so marked as to record a predetermined number of valid votes for each candidate and on each question and shall include for each office one or more ballots which are improperly marked and one or more ballots which have votes in excess of the number allowed by law in order to test the ability of the ballot scanner to reject such votes. The ballot scanner shall not be approved unless it produces an errorless count. Then it goes on from there in a similar vein.

And then basically the pretested ballot scanners then can be placed at various polling stations. I'm trying to understand because one of the things it looks at is whether it catches whether -- the test is trying to catch whether there is an overvote, whether there are votes in excess of the number.

I'm assuming that that really is just dealing with -is this just dealing with paper ballots that are used for
absentee ballots?

MR. TYSON: If you'll let us consult just briefly.

THE COURT: All right. Sure.

(There was a brief pause in the proceedings.)

MR. TYSON: Your Honor, yes, you are correct. The test deck that would be involved with this test of an optical scanner will involve both ballot-marked device created ballots

and hand-marked paper ballots. But because the ballot-marked device ballot is not going to create an overvote situation, the errors that are referenced here would be on the hand-marked paper ballots for purposes of testing.

I think it is important to note that the optical scanners themselves, once they are programmed for an election, if you put a BMD-marked ballot with a bar code in, it will read and tabulate based off that. If you put a hand-marked paper ballot into the same unit, it will also retabulate based off that. The scanner is programmed for both when it is programmed for the election.

THE COURT: So what does it mean the test shall be conducted by processing a preaudited group of ballots? What does that mean?

MR. TYSON: So in that scenario, it is a test deck of ballots where they have been manually counted. So we know exactly what the result should be. And so when we run them through the optical scanner, if the optical scanner returns the same result that has been determined by the hand preparation of that test deck, then we can have confirmation that the scanner is performing as it was programmed.

THE COURT: And when we are -- when you are speaking of having counted the test deck, this is sort of when the -- in terms of the BMD portion of the ballot, you are really talking about you are going to count the ultimate selection that you

have made, George Washington or whatever else, and I vote to suspend the Constitution or whatever it is as the referendum or to confirm it? You are going to count those choices, and then you are going to say there are 40 for George Washington, and you are going to check and see when you run it through does it -- I know it says scanner here. But as I -- the more I read about it, it is a scanner/tabulator; right?

MR. TYSON: Yes, it is a scanner that is tabulating, yes.

THE COURT: Tabulating. So then you are going to look at what the tabulation -- does it come to what you actually manually counted? 40 George Washington votes?

MR. TYSON: Correct. Does it match? That is just to confirm that the scanner has been programmed and is behaving as it is expected to behave.

THE COURT: And are you anticipating you are going to go all the way through the ballot when you -- or are you just talking a few races when this is done? Because there is nothing in the regs that kind of enlightens me. So I'm just trying to understand that.

MR. TYSON: So, Your Honor, there is a set of instructions that relates to logic and accuracy testing, which is what this process is that outlines that. We believe that it covers the entire ballot and all the races on the ballot. But we can file for the Court, if that would be assistive to you,

1 the entirety of the instructions about logic and accuracy for 2 this context, if that would be helpful. THE COURT: It probably would be. I wanted to be 3 4 sure I was understanding it correctly. 5 And would those instructions indicate how large the 6 deck should be? 7 MR. TYSON: From the look on Mr. Rayburn's face, I'm 8 thinking they probably don't. But we can determine that as well. I don't know that we know that sitting right here. 9 10 THE COURT: Well, I mean, I assume this is something 11 that people who are working in the precinct management have 12 been trained on? 13 MR. TYSON: Your Honor, the election -- not the 14 precinct officials. But the county election officials who are 15 confirming the structure and the logic and accuracy piece, that 16 is not going to be precinct workers. That would be county 17 officials. And there has been training on this point. 18 THE COURT: And they are the ones who would be doing 19 this? 20

MR. TYSON: Yes, Your Honor. This would be preelection preparation of the voting machines.

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THE COURT: Well, it just was because the superintendent shall have the ballot scanners tested to ascertain that they will accurately count the votes cast for all offices. So -- and there was going to be public notice and

1 representatives of the political parties and news media, et 2 cetera, could observe that. 3 So that is all at the county elections office? 4 MR. TYSON: Yes, Your Honor, it is. 5 One thing that might also be helpful: 6 Election Board at its last meeting adopted some additional 7 rules that I don't think we filed with the Court yet as it relates to recounts, which outlines a similar procedure for 8 9 testing scanners for recounts. 10 If I could, I can provide you with that. Okay. I think I do have that. 11 THE COURT: 12 MR. TYSON: There has been a further update to the 13 rule at this most recent State Election Board meeting. 14 THE COURT: All right. Thank you. 15 MR. TYSON: I'm sorry, Your Honor. It is a proposed 16 It will be considered at the April 15 meeting. 17 been put out for notice and comment. And it is an expansion 18 and clarification of some additional pieces. The underlined 19 portions are the added language regarding how recounts will be 20 conducted by electronic tabulation, and it involves some of the 21 similar issues that are in this statute for logic and accuracy at the outset. 2.2 23 Your Honor, one --THE COURT: So I had what was filed at Document 24

Number 717-1 -- I'm sorry -- 183-1-15.

25

So this is -- was on the issue of optical scan recount procedure, and you are saying this supplements?

MR. TYSON: Yes, Your Honor. There is a set of rules that were adopted at a meeting that become effective on March 22nd. That's the group that we filed yesterday. There has been further updates to those rules that will be considered at the April 15 meeting that have been put out for notice and comment.

I also have one other rule that is referenced in the recount piece that is the definition of a vote that has also been updated. If I can hand that up and provide it to you. I have provided it to opposing counsel.

THE COURT: Sure.

MR. TYSON: And to be clear, these rules are not the procedure involved in 374, the statute. But it is a similar procedure. And then we'll file the full logic and accuracy instructions referenced in 374 for you.

THE COURT: Why don't I take a minute to just look at this so I don't have to have your folks whipsawed by my asking two different times questions about this.

I know that -- do you have an electronic copy that you could provide to counsel in Washington who is here by standby?

MR. TYSON: Yes, Your Honor. I believe it has been posted to the Secretary of State website. But we will -- it

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1
               I'm sorry. State Election Board website.
 2
     rules have now been posted to the State Election Board website.
 3
               THE COURT: Can you send counsel -- do you have a
 4
     computer with you? Yes?
 5
               MR. McGUIRE: Yes. Yes.
               THE COURT: All right. Can you send him where it is
 6
 7
     located so that he can get it if he needs to?
               MR. TYSON: Mr. Russo sent that to Mr. McGuire.
 8
 9
     Hopefully, it will come through on his system momentarily.
10
               THE COURT: All right.
               So as I understand from briefly looking at this, if
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12
    this is correct, in the event the State Board adopts the
13
    proposed regulation at its April meeting, Election Board Rule
14
     183-15-.2(2) would be modified so that in doing recounts, if
15
    the electronic tabulated result was inconsistent with a printed
16
     text vote count on any particular item, the printed text would
17
    control? That is the most significant item for purposes of
18
     this case; is that correct?
19
               MR. TYSON: Yes. Paragraph (j) in that list, yes;
20
     that if there is a discrepancy between what is tabulated and
     the printed text, the human readable text controls in that
21
     situation.
2.2
23
               MR. CROSS: So, Your Honor, could I get clarification
24
     on that? So in what situation does the human readable text
25
     control?
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I think you are referring to .02 or .03.
 1
               MR. TYSON:
 2
                           What you just said. You said there was
               MR. CROSS:
 3
    a --
 4
               MR. TYSON:
                           .02, (i)
 5
               THE COURT:
                           There are two different areas where it is
    discussed. And he was -- my understanding now is that you
 6
 7
     were -- counsel for the state was referring to Section (j) of
 8
     183-1-15-.02; right? Then there was another similar discussion
 9
     in (j) in the section above. Is that what you are referring
    to?
10
11
               MR. TYSON: Yes, Your Honor, (j). And it refers to
12
     21-2-495, which is the recount or recanvass provision, and then
13
     21-2-498, which is the auditing provision of the statutes.
14
     That is when that review occurs.
15
               MR. CROSS: Could I ask, Your Honor -- just so I
    understand, so what (j) is saying, if I understand Mr. Tyson,
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17
     is that in the context of an audit, if they discover that the
18
     way the QR code is tabulated is different than what the human
19
     readable text says, the human readable text is the ballot of
20
     record and it controls?
21
               MR. RUSSO: I don't think it is just the QR code.
22
     think it is if the results -- if there is a discrepancy between
23
     the tabulated results when they are run through the scanner --
24
    because you run everything through the scanner -- and what is
25
    on the paper, whether it is a hand-marked paper ballot or just
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the BMD printout, what is on the human readable portion is what controls. And so that is part of (j) -- Subsection (j) of .02.

Then .03 is on how the recounts work. And so if you look at the first section, recount by electronic tabulation, that is how you -- you run through a certain number of test ballots to make sure that the scanner is working properly and compare that to the ballot -- paper ballot.

If the scanner doesn't -- if the scanner is coming up with different results, you go to the next scanner. If none of the scanners are working properly, then you go to all hand-marked -- excuse me -- hand-counted -- a completely hand-counted process.

So either way you are looking, the paper ballot is what controls in the event of a discrepancy. There is either a discrepancy or there is not between what the scanner is reading and what is on the paper ballot.

So I don't know if that helps to answer your question.

MR. CROSS: It does. I see a concern. But I don't want to jump in if Your Honor has questions.

THE COURT: Well, I just want to walk through and make sure I understand because it is a material addition here.

So if we look at Page 4 of what you've provided, just simply to make sure we -- this deals with the definition of a vote?

MR. TYSON: Yes.

2 MR. CROSS: Are you looking at Subparagraph (h)?

THE COURT: Right. In Subparagraph (h), it says, a vote cast on an optical scanned ballot marked by an electronic ballot marker shall be the choices indicated by the printed paper ballot.

So are we -- are we talking about the printed paper ballot that might be in a box -- in a box somewhere, or are we talking about the choices indicated in the summary section of the BMD part of the ballot?

MR. TYSON: So, Your Honor, I think it is important to clarify. Mr. Rayburn may be able to offer some more detail on this. But there are some states that would utilize just the images retained by the ballot scanner, by the actual scanning unit, for purposes of conducting a recount.

In this situation, we're talking about the printed paper ballot is what must be handled. So we're not going to look at just the images that were captured by the scanner.

We're going to return back to the paper ballot itself. And that's just to give everybody confidence that nothing has happened that is causing the scanner to misread the ballot when it reads it.

THE COURT: So you are going to go back to the paper ballots that were cast that were stored in the ballot boxes?

MR. TYSON: Yes, Your Honor.

THE COURT: All right. And so if it is a statewide election, you're going to have a massive recount of the paper -- the printed paper ballots that are stored everywhere?

MR. TYSON: Yes, Your Honor. So a recount -- the procedures for recount are in the statute. And if it was a statewide recount, the Secretary would notify all the superintendents to conduct a recount. And the recount must be of the paper ballots that are rescanned in accordance with the .03 rule that we have outlined and just provided to the Court.

THE COURT: The new one?

MR. TYSON: Yes, Your Honor, assuming the State Election Board adopts it. Yes.

THE COURT: Would it be possible for you just simply to walk us through these? Because I feel that I'm -- because then I think it might be more logical and easier for us to ask any questions we have. Because I think a lot of -- many of the questions we have and some of the questions I had of Dr. Gilbert's understanding -- and maybe he understood things that he had been told that were not yet fully articulated or presented that -- you know, I just wondered what the basis of his thinking was about a variety of things. So maybe if you walk us through this, it would be helpful.

MR. TYSON: Yes, Your Honor. And it might be -- just in the interest of efficiency, it might be best to have Mr. Rayburn do this for us since he is the one that is

1 involved, if that is all right. 2 THE COURT: That is fine. MR. RAYBURN: Hello, Your Honor. 3 4 THE COURT: Just identify yourself for the record, if 5 you would. 6 MR. RAYBURN: Sure. My name is Kevin Rayburn, 7 K-E-V-I-N R-A-Y-B-U-R-N. I'm the deputy elections director and deputy general counsel for the Georgia Secretary of State. 8 9 THE COURT: Thank you very much, sir. So, Your Honor, I have handed Mr. Rayburn 10 MR. TYSON: 11 a copy of what we have provided to you of the recount procedure, Rule .03. And he can walk us through the process of 12 13 that and how that recount would be conducted. 14 MR. RAYBURN: So with the proposed changes before the 15 recount begins, the county superintendents will conduct a test 16 of each of the central scanning devices that will be used in a 17 recount. 18 During a normal election, we have most of our ballots 19 cast on precinct scanners. There will be at least one in each 20

polling place. And then absentee by mail ballots are centrally scanned at the county offices on central scanners. They are separate pieces of equipment.

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For a recount, we'll have all of the ballots scanned on those central scanners. So there is some independence there between what was tabulated on election day, that equipment, and what would be used in a recount.

But before you can begin the recount, there is essentially a mini audit that is conducted on each of the central tabulators that will be used in the recount. And at least 100 ballots are to be selected from four different ballot boxes. Three of those ballot boxes need to be ballot-marking device. So the in-person voting that has the QR code and the human text that 95 percent of voters will be voting on -- or at least traditionally have voted in person. So three of the four ballot boxes should take at least 25 ballots from each of those three ballot boxes, which adds up to 75. Those are hand counted.

Similar to the L&A procedure we talked about earlier, you determine what those votes are by human review, hand to eye. Then you run them through the central scanner. And it will produce a result. Then you compare those two, and they should match.

Then we will also take 25 absentee by mail ballots, which are the hand-marked, filled in the bubbles. And then those will also be hand counted.

THE COURT: When we say hand counted, you literally mean basically I'm Joe Blow, Jenny Turner, et cetera?

MR. RAYBURN: Absolutely.

THE COURT: Somebody is going to call out the name, and it is going to be recorded?

MR. RAYBURN: Absolutely. One ballot at a time, hold the ballot up, review the voter's intent, and then mark it down so you can keep that tally. Then you compare that tally to the electronic tally.

THE COURT: All right.

MR. RAYBURN: And so if a scanner, after going through that, it matches -- the hand tally matches the electronic tally, that scanner can then be used in a recount.

If none of the scanners can be used in a recount -so if we have the scanners failing that test -- then the other
new part of this rule that was proposed is that then there
would be a manual hand recount audit.

So there is a mechanism in place. If the tabulators are not performing as they should before you begin the recount, there is another mechanism to do that recount manually.

Do you want me to go further through the recount process?

THE COURT: Yes. Because that was the first question I had when it said -- in the currently adopted provision where it said a manual hand count of the test deck shall be made.

And I was trying to understand what was being looked at.

At that point when you are looking at that, you are doing the manual hand count, you are looking at the BMD-produced ballot -- is that right? -- to do the manual hand count?

MR. RAYBURN: Just to be clear, are we talking about the recount process or going back to the logic and accuracy process in the statute?

THE COURT: No. I'm looking at the version of the optical scan recount procedure that was adopted by the State Board already.

MR. RAYBURN: Sure.

THE COURT: And that has the provision that you are talking about, the 75 ballots and the 25 ballots. And it uses -- when it is talking about a manual hand count, I wondered whether it was only talking about a manual hand count of the absentee ballots or what was being -- what do we mean by manual hand count.

And you are saying it means that you are going to go over all of the choices on the printout portion of the ballot?

MR. RAYBURN: So for a recount, you are manually -you are targeting a single race. So there is usually one race
that is going through the recount. So that is what they are
going to tally, whatever that one race is. It might be top of
the ticket. It might be the bottom or somewhere in between.

THE COURT: Right. But it is the BMD ultimately produced ballot -- isn't that right? -- that you are hand counting the portion of the ticker tape that was produced? Is that --

MR. RAYBURN: So with the recount, when you pull the

original -- these are original ballots that were actually cast.

So we're not doing a made-up ballot to test. We're actually

going to be using actual ballots that were used in the election

for the test deck.

THE COURT: All right.

MR. RAYBURN: And that is --

THE COURT: That is what I'm trying to -- is this the physical ballot that was in the boxes, or is this the scanned ballot where there is a portion of the ballot that just has -- has the bar code and there is a portion that just says all -- everyone you selected?

MR. RAYBURN: So these are the physical paper ballots that were actually cast. Right. The rule lays out that 75 of the ballots at least need to be from the BMDs and 25 percent will be hand marked.

MR. TYSON: All of them are manually counted. So the BMD ballots are manually counted by the human readable portion. The absentee ballots are counted by the voter intent under the definition of a vote.

THE COURT: Right. And no judgment implied here. I just want to make 100 percent sure that I'm not making a mistake in understanding this. This is the -- what is -- when you ended up -- the voter -- you are looking at what the BMD/scanner produced and you are saying, all right, it just has a summary, Johnny Smith picked, and Johnny -- it is -- let's

say it is a Congressional race for Johnny Smith and you are only doing a recount for the Johnny Smith race.

That is what -- you are looking at the electronically-produced document at that point? You are not -- is that right?

MR. RAYBURN: That's correct. The recount team that is preparing and testing the equipment is looking at in human words the voter's choice.

THE COURT: All right. But you are not going -- but what I'm just trying to get to is you are or you are not going back to the ballot boxes produced at that point in time?

MR. RAYBURN: So based on the proposed rules that were posted, the test deck would be actual ballots. So they would actually open up four ballot boxes. Three of which were ballot-marking device in-person voting. One was vote by mail.

THE COURT: All right. Go ahead.

MR. RAYBURN: So once the equipment has presumably passed the recount pretest, the county would then ballot box by ballot box remove the ballots and rescan them through a central tabulator so that they are tabulated again.

The whole time, they need to keep close and careful watch of those ballots, make sure they are together so that they can be put back into that same ballot box. So they will do that one at a time. If they place -- like Fulton County will probably have multiple scanners. But one ballot box per

scanner. And the ballots will be scanned through and be tabulated.

If there are any overvotes detected, the scanner will stop and that ballot will be identified. And a ballot -- and a recount committee will review that ballot and determine what was the voter's intent.

So it might be that there is an overvote, or it might be that you could tell with human review what the voter's clear intent was. And then you could what's called duplicate that ballot, recreate it with the voter's intent reflected, and then scan that instead.

So you go through the whole -- the recount goes through every ballot that was cast -- is rescanned. Then you have that retabulation at the end, and that is the new official result.

THE COURT: All right. How does this work in the audit context? Do one of these relate to an audit context also?

MR. TYSON: Your Honor, it might be helpful for Mr. Rayburn to kind of walk through the development of the audit process. It might be helpful at this point, if we're switching to that track.

THE COURT: This proposal was posted today; is that right?

MR. RUSSO: It was posted today, yes, ma'am.

MR. TYSON: Yes, Your Honor.

THE COURT: All right. Go ahead. Thank you.

MR. RAYBURN: The state right now is in the process of drafting audit rules. And part of that is going through a series of test audits, pilot audits in various elections. We did our first one back in November of 2019. We conducted another one in February --

THE COURT: That is the one in Cartersville?

MR. RAYBURN: Yes, ma'am. Another one was in February of 2020. That was in Lee County of a senate district 13 race. We will be doing another audit pilot in Fulton County of the presidential preference primary for the democratic party.

We intend to keep every election this year -- build and do more and more complex pilot audits so that we build that confidence in that and understand the processes that should go into the rule.

There's no such thing as just an audit. That is a vague term. There's different types of audits. There's a traditional post-election tabulation audit that takes, for example, a batch of ballots. Think of all the ballots that went through a scanner into a ballot box. That is a batch.

The scanner, like you mentioned earlier, has a ticker tape that told you what that result was. And we can take those ballots out, hand count them, and compare them to the ticker

tape.

So you compare the manual human tally that was looking at the human words of the voters' choices and comparing it to what the scanner interpreted those voters' choice as. So that is a traditional comparison batch audit.

And then you may have heard of something called a risk-limiting audit, which is a different type of audit that is being tested throughout the country. There's one state right now that does that statewide. And that is Colorado.

But even with the risk-limiting audit, there are three different types of risk-limiting audits. There is a ballot comparison audit. There is a ballot polling risk-limiting audit. And there is a batch comparison risk-limiting audit.

So the state has lots of options, and there might be times you would want to do one type of audit versus another.

So we are testing these various types of audits. We're conversing with experts nationally from the Brennan Center, VotingWorks, Democracy Fund, Verified Voting.

So we have really good experts that are helping us through this process. We're still drafting those rules. And, like I mentioned, we're doing more and more pilots and building -- Fulton will be definitely the largest election and largest county we will do that with.

And then thereafter we want to do a multicounty

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1
    audit. Because part of this is making sure multiple counties
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     can audit at the same time.
               THE COURT: All right. So just getting back to the
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 4
    proposed rule that you gave me, I'm just trying to -- one of
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     them was for recounts, and one of them was the definition of a
 6
    vote.
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               And is this for purposes -- for all purposes, whether
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     for audit or other purposes; is that right?
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               MR. RAYBURN: Correct.
               THE COURT: This proposed rule on what is the
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     definition of a vote?
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               MR. RAYBURN: That's correct.
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               MR. CROSS: Your Honor, while you are on that, could
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     I ask a quick question?
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               THE COURT: Yes.
              MR. CROSS:
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                           So Subparagraph (h) --
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                           In which one?
               THE COURT:
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               MR. CROSS: 183-1-15-.02, definition of a vote.
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    one that is definition of a vote, Subparagraph (h) looks to be
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     the provision that defines the vote, as I read this. And it
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     says, as we read earlier, the vote cast on an optical scanned
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    ballot marked by an electronic ballot marker shall be the
     choices indicated by the printed paper ballot.
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               Is that not the human readable text? Because if you
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look at (j), (j) specifically refers to the printed text on the

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ballot. So I'm trying to understand: Is the exclusion of the word text there meant that it is the whole ballot that controls and so it could be the QR code in terms of the definition of the ballot?

THE COURT: Well, let's just have him walk -- I was just about to have him walk us through that. I did note the differences. But that is part of my question.

Why don't you just -- why don't you walk us through what the relevant additions are and how they work together. I think it was --

MR. RAYBURN: So (h) is a good place to start, I think. So (h) is saying that the vote on a ballot-marking device ballot is the choices indicated on the physical paper.

So a ballot has the voter's intent manifested in two different ways. And that's true whether it is a hand-marked paper ballot or a ballot-marking device ballot.

With a hand-marked paper ballot, you have an oval that is circled in. And that is a coordinate. And so the coordinate is the first manifestation of the voter's vote. And that is what is detected by an optical scanner, a coordinate.

The other manifestation of a voter's vote is the oval next to human words. And so when a human looks at that, they don't know what the coordinates are. They don't know what the programming is. They know I have a mark next to human words. And so I'm interpreting that to mean that the voter wanted

their vote to be for the candidate where the mark was next to the human words.

So a hand-marked paper ballot has the vote manifested in two ways. So too does a ballot-marking device ballot. With a ballot-marking device, you have the QR code with coordinates. That is what is in the QR code. So it is using the same coordinate programming in the optical scanner to interpret both types of ballots.

You also have the human words written out and only the choices of the voter. So you can see exactly the voter's choice written in human form -- human readable form on the ballot. So it is manifested in two places.

THE COURT: On the same piece of paper?

MR. RAYBURN: On the same piece of paper. That is right. So in both cases, those choices are identical but it is manifested in two ways. Humans can see one of those two ways. The scanner reads the other way.

THE COURT: All right.

MR. RAYBURN: So --

THE COURT: Getting back to (h) --

MR. RAYBURN: Yes, ma'am.

THE COURT: -- a vote cast on an optical scan ballot marked by an electronic ballot marker shall be the choices indicated by the printed paper ballot. So that is on the one with the two different choices, the QR code and the -- and also

the summary choices.

Or is it the -- that is what I think the question was here.

MR. RAYBURN: Sure. So the choices are in two places. So they are saying the same things. They are indicating the same vote.

THE COURT: You hope. We hope.

MR. RAYBURN: So when you go to (j), that is where it says, if there is somehow a discrepancy, which there should never be -- but if there is a discrepancy, then the human words are the controlling choice of the voter. That is the manifestation of the voter's intent.

Then the same thing occurs in (e) regarding hand-marked paper ballots. If the coordinate is different -the coordinate programming is different than the voter's choice as seen with human eyes by having a mark next to a name, then the mark next to the name is the voter's choice that should be counted.

So there are parallel provisions dealing with both ballots acknowledging that both ballot types have the voter's choice manifested in two different ways.

THE COURT: I think the thing that is a little confusing is that, for purposes of the recount, you go back and look at the original physical ballot. But for purposes of auditing, you don't do that -- right? -- as I understand it?

1 You are relying -- the vote that is deemed the 2 real -- and maybe not just for auditing -- for definition of vote optical scanned voting systems that the vote is not what 3 4 is in the boxes but is whatever is on the ticker tape summary 5 of your vote? 6 MR. RAYBURN: So the audit is comparing the count of 7 the paper ballots to the ticker tape to see was the tabulator 8 accurate. 9 THE COURT: All right. 10 MR. RAYBURN: So you are needing both pieces of information. 11 12 MR. TYSON: And you have to go back to the paper 13 ballots to do the audit. You use the paper ballots for 14 purposes of the audit in different ways depending on the type 15 of the audit. 16 MR. RAYBURN: And in both cases on election night, 17 whether it is the coordinates on a hand-marked paper ballot or 18 the coordinates in the QR code on a ballot-marking device 19 ballot, that is what is the initial count. 20 THE COURT: Right. MR. RAYBURN: So the point of the recount is to 21 22 retabulate. But, first, you check to make sure the tabulators 23 are working accurately. 24 THE COURT: I understand the recount process.

back to the questioning about if this is what applies as to an

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audit process, which is what I had understood at some point.

But maybe I'm in error.

I'm trying to understand: If you were auditing it, are you -- are you getting the ballots that were deposited in the box or not? That is -- because the way I read this is that it is the text on the BMD-produced ballot that is on the image.

MR. RAYBURN: I think I understand where we are at. So the ballot images that are taken by the scanner and stored in the scanner, those are not used in an audit. They are not used in a recount.

For an audit, you go back and you touch the physical paper. You actually pull the ballot boxes. And depending on the type of audit would determine how you select the individual ballots. You might select at the ballot box level, or you might select at an individual ballot level.

But you are touching the paper ballots. You don't even use the images. And so you go to the paper ballots. You look at the human readable choice of the voter for the BMD ballot. And you mark that down. You keep that tally as you go through the sample ballot you are reviewing. Then you'll need to compare that to something to check the tabulator.

So with a risk-limiting audit, it depends on the type of risk-limiting audit. You would be comparing it to the aggregate totals. With a batch comparison audit, if you have ballot box A, you then look at the electronic results from

1 ballot box A, the hand count of ballot box A, and you can 2 compare those two things and look for discrepancies between the 3 two results. 4 THE COURT: When we talk about the printed paper 5 ballot or the printed text, you are talking about the original 6 ballot that the voter basically shot through the system and it 7 ended up in a box? 8 MR. RAYBURN: Yes, Your Honor. 9 THE COURT: That is kind of a stupid way of describing it. But I'm trying to make sure that we're -- we're 10 11 talking about the same item. Because we have different things that might be characterized as the ballot, which I quess is 12 13 what you are trying to address here. And I'm still trying to 14 make sure I have got it right. 15 All right. Are there follow-up questions from plaintiffs' counsel, just so we are sure that we are all 16 17 understanding the same thing? 18 MR. CROSS: I'm just reviewing my notes. Hold on one 19 second. 20 THE COURT: All right. 21 (There was a brief pause in the proceedings.) 2.2 MR. CROSS: So I do have a few questions, Your Honor. 23 THE COURT: Okay. 24 MR. CROSS: So the mini audit that was described, is 25 that done just for the purpose of the recount? Meaning, if you are doing a recount, the mini audit is the -- what is described in Subparagraph (1)(c) of Rule 183-1-15.03? Is that the mini audit and so that is only done if you are going to do a recount to confirm the accuracy of the machine according to how that is described here?

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MR. RAYBURN: So you've got two different testings.

You've got the preelection testing that is done. The logic and accuracy testing, which someone might call a mini audit.

But then what you seem to be describing is what is in the recount rule. That would be done specifically before you begin a recount. And there are certain circumstances where a recount can be conducted by law.

And if one of those circumstances is invoked, then this is the first process to make sure you can use the voting equipment such that the recount would be an electronic retabulation. And if it fails the testing process, then the recount would have to be done by hand.

MR. CROSS: So when you said mini audit, what were you referring to?

MR. RAYBURN: The description in Rule (1)(c).

MR. CROSS: Okay. So we are talking about the same thing. That is the mini audit you were talking about.

That is done only for the purpose of a recount; is that right?

MR. RAYBURN: This specific paragraph, yes. There

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     will be different audit rules that would govern an audit of the
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     results.
               MR. CROSS: Okay. We don't yet have audit rules?
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               MR. RAYBURN: That's correct.
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               MR. CROSS: And then just so I understand this, you
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     said that, still looking at 183, the recount procedure, if you
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     turn to Page 5 under recount by manual count, (2)(a), does
     (2) (a) 1 and (2) (a) 2 --
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               THE COURT: Are we on the recount one? I'm sorry.
               MR. CROSS: Yes. I'm sorry, Your Honor. Still on
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11
    that recount one.
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                           What page?
               THE COURT:
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              MR. CROSS: Page 5.
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               THE COURT:
                           Okay.
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                           There is a heading that reads recount by
               MR. CROSS:
    manual hand count. Under (2)(a), there's two provisions, 1 and
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     2.
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               Do I read this right that those are the only
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     circumstances under which a recount can be performed by manual
     count -- manual hand count?
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               MR. RAYBURN: Yes. This rule is saying these are the
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    two different provisions that would allow for a manual recount.
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     So one of these two conditions would have to be present.
     Either the equipment that you are testing with the mini audit
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    before the recount -- all that equipment has failed.
                                                            That
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1 would be (a) (1) when it says as provided under 2 Rule 183-1-15-.03(1)(c). That is referencing the mini audit 3 provision. 4 So if your equipment has failed the pre-recount mini audit, then that would be an allowable instance where you could 5 6 do a manual recount. The other allowable instance would be 7 pursuant to a court order. 8 THE COURT: So, you know, we have recounts in the 9 state when there is less than 5 -- .5 percent or something like 10 that --11 MR. RAYBURN: Yes, Your Honor. 12 THE COURT: -- difference. So that wouldn't trigger 13 one -- a manual recount? 14 MR. RAYBURN: So that would trigger a recount. So 15 once a recount is authorized, then you have to do that testing. 16 So if it fails the testing, that is when the recount goes from an electronic recount or a retabulation to a manual recount. 17 18 MR. CROSS: The question I had, Your Honor, if I'm 19 reading this right, this seems to say that this rule would 20 prohibit a manual hand count unless it satisfies one of those 21 two provisions? Meaning the rule prohibits a manual hand count unless it fails the mini audit described in (1)(c) or a court 22 23 orders it. 24 Is that right? 25 MR. RAYBURN: So for a recount to be a manual

1 recount, it has to meet one of those two conditions per the 2 rule. Once again, the audit rules are not yet promulgated so that obviously an audit is a manual count. So audits and 3 4 recounts do play -- interplay together. But for now, for a 5 manual recount, these are the two provisions allowed by the 6 rule and only the two provisions allowed by the rule. 7 MR. CROSS: So in Your Honor's example, if we had a close election, this rule would prohibit a manual recount for 8 9 that unless it failed the mini audit or a court ordered it? 10 MR. RAYBURN: That was kind of compounded. 11 MR. CROSS: Sorry. 12 MR. RAYBURN: But if there is less than half a 13 percent difference between the winner and the loser, then the 14 law allows for the losing candidate to request a recount. 15 If a recount is requested, you test the equipment. 16 If the equipment fails the test provided for in the rule, then 17 the backup option is a manual recount. 18 MR. TYSON: As Your Honor is aware, in the election 19 contest procedures as well, there is a range of remedies a 20 superior court judge has when faced with an election contest in a close election. And that would be, I think, our primary 21 22 method of getting to a court order under this particular rule. 23 THE COURT: All right. 24 MR. CROSS: Could I ask two more questions on this? 25 THE COURT: Yes.

1	MR. CROSS: Still on the recount procedure, the mini
2	audit described in (1)(c), that would not capture a ballot that
3	at the time it was printed did not accurately capture the
4	selections the voter intended? Meaning, if the ballot had
5	selections that corresponded with the QR code but it was not
6	the selections the voter intended and the voter didn't see
7	that, that would not be captured in the mini audit; right?
8	MR. RAYBURN: So, Your Honor, just like if you were
9	marking a hand-marked paper ballot and you did not mark it
10	correctly, it would also not reflect the voter's intent.
11	MR. CROSS: Except here it is the BMD that is marking
12	it, not the the error would be on the part of the BMD, not
13	the voter since the voter is not marking that by hand?
14	MR. RAYBURN: In this hypothetical, you are assuming
15	that the BMD is not accurately recording the voter's vote.
16	MR. CROSS: That is the question. If we have a
17	ballot where the BMD is not accurately recording the vote in
18	the human readable portion but the human readable portion
19	matches the QR code, the mini ballot I'm sorry the mini
20	audit in (1)(c) would not capture that situation; right?
21	MR. RAYBURN: I mean, the recount is a hand count of
22	that ballot. So if the human words it is counting the human
23	words. So you're talking about the ballot itself being wrong.
24	MR. CROSS: Correct. That would not get captured in
25	the mini audit in (1)(c); right?

1 Just like if the ballot -- the MR. RAYBURN: True. 2 hand-marked paper ballot is itself wrong, it would not. MR. CROSS: The last question I had, Your Honor, if 3 4 we can turn back to the definition of voting rule just quickly 5 on this. So under Subparagraph (h) that we looked at, the 6 definition of voting -- so my understanding was the definition 7 of voting includes both manifestations of the vote? So the QR code and the human readable portion unless --8 9 Well, let me just start there. Is that right? Both are captured on the paper ballot? 10 MR. RAYBURN: Yes, with both types of paper ballots. 11 MR. CROSS: So the only time the human readable 12 13 portion --14 THE COURT: All right. Just ask a question. 15 cross-examine him. MR. CROSS: 16 I'm sorry. I understand. I don't mean 17 to cross-examine him. I'm just want to make sure I understand. 18 Is it the case that the only time the human readable portion would become the ballot of record is if the ballot has 19 20 failed the mini audit in (1)(c) of the recount procedure? Or 21 is there another circumstance in which the human readable 22 portion would become the ballot of record? MR. RAYBURN: I don't understand your question. 23 24 MR. CROSS: So I'm trying to figure out in what 25 situation does the human readable portion become the ballot --

1 it is defined as the vote. It becomes the ballot of record as 2 opposed to the QR code.

As I read this, it sounds like that would only happen if the ballot is found to have a discrepancy in the -- only if some discrepancy arises in the mini audit portion of (1)(c).

MR. RAYBURN: Well, the initial tally for all ballots is based on coordinates. So the initial tally is not looking at any -- for any type of ballot. Anything except coordinates that were the manifestations of the voter's intent.

MR. CROSS: Let me just -- I'll take the Court's instruction and try a better question. In (h), as you said, there's two manifestations of the voter's intent, assuming the QR code is right and the text is right.

In what situation does the human readable portion become the ballot of record under these rules?

MR. RAYBURN: What do you mean by ballot of record?

MR. CROSS: The portion that counts to tabulate the vote.

MR. RAYBURN: So in a recount, if you've -- if there is an electronic retabulation, it is running the ballots through the tabulators again. So it is checking the coordinates. If there is a discrepancy, then the human readable portion becomes the vote -- becomes the vote for that ballot.

MR. CROSS: Okay. So the human readable portion of

1 the ballot is what counts for the vote only if we're under 2 (1) (c) of the tabulation procedure -- the recount procedure; right? Meaning, something has failed, and so now you are going 3 4 to rely on the human readable portion? That is what I'm trying 5 to understand. Is that right? MR. RAYBURN: No tabulator looks at the human 6 7 readable portion. So the tabulators are tabulating based on coordinates. 8 9 Do you understand what I'm asking, Your Honor? It doesn't seem complicated. 10 11 MR. TYSON: Your Honor, I don't understand what we 12 are talking about. 13 MR. MILLER: I'm sorry. But at this point, I think 14 we've repeated the same question and we're going down a line of 15 cross-examination and asking Mr. Rayburn for a legal conclusion as to the rules and regulations that were posted this morning. 16 17 MR. CROSS: I don't mean it to be cross. It is just 18 really important. 19 THE COURT: All right. I understand. The thing is 20 there are a variety of things being asked here. And I mean, 21 these are significant questions. It is a little hard because 22 everyone just is looking at it for the first time, frankly. 23 MR. CROSS: We just got it. 24 THE COURT: And because -- I mean, we use the word

printed paper ballot in different ways too. So I think what I

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would suggest is the last question -- because you are trying to get at something, but it is not 100 percent clear.

If you need -- if you need a minute to actually try to ask in a more basic term what the question is and think about it, then let's just pause for a minute so you can do that.

MR. CROSS: So I can explain the context of what I'm asking. And I don't mean this to be cross. I'm genuinely trying to understand this.

Dr. Gilbert in his declaration many times relies on what he refers to as the human readable record controls. I'll give you an example.

THE COURT: I think they remember.

MR. CROSS: Okay. That is what I'm trying to understand. Oftentimes when he is saying this system is okay, he is saying it is okay because in his language the human readable record controls. The human readable record is that portion.

My question is: Under their rules, when does the human readable record control in the way that Dr. Gilbert has described that? That is all I'm trying to understand. It seems like that is only if the mini audit fails.

THE COURT: No. That is --

MR. MILLER: Your Honor --

MR. TYSON: I'm sorry.

MR. MILLER: At this point, the question has been compounded not only within itself but also with someone else's declaration and presupposing a characterization of it. But, you know, Mr. Rayburn --

THE COURT: I don't think there was anything wrong with the characterization. But let's just try to answer this. And then we will try to move on.

But I think it is such a -- it is a central question.

And it is what is lurking obviously here in one form or another in some of the questions I have asked beforehand.

But -- so -- because I didn't understand why

Dr. Gilbert was saying things -- it was the human readable

portion that controls and thought it was kind of an unfair -- I

wanted to start with the state because I didn't want to put him

in that position because he said I haven't used the system, I

don't know, it is my understanding. So I understood he knew

from somebody that this was so. So -- but I have got two of

you here.

MR. MILLER: I'm sorry. If I may, just on

Dr. Gilbert, since he is on the phone, I think just two points

that will -- he can explain on the phone as well. But the

timing of when his declaration was written was obviously before

any rule.

THE COURT: Right. I understand that.

MR. MILLER: And also the delineation between

recounts and audits is part of what is in his declaration too.

So --

THE COURT: Right.

MR. TYSON: So we have a whole section of what defines a vote. So I guess, Mr. Rayburn, can you try to answer? I mean, we have a whole section outlining what a vote is. So in light of all that...

MR. RAYBURN: So I mean, the audit will look only at the human readable portion. So in an audit, 100 percent the human readable portion controls. And with a recount, there is the two-step process. First, you check the equipment by looking at the human readable portion of a sample of ballots; comparing it to a retabulation of that sample to make sure that the scanners are accurate.

If the scanners are accurately interpreting those votes, then you do the recount through a retabulation. And if there is a discrepancy between what the scanner is reading and the human readable portion, the human readable portion would control.

THE COURT: All right. Just with respect to the recount, let me ask you this: We're talking about 75

BMD-created votes that you are running -- well, you have got the ballots I realize. You have got the original ballots, and then you are able to see how they come up.

And this is sort of an errant question. But,

1 obviously, there might be circumstances though that are 2 different throughout the state, if you are talking about a statewide election. It is kind of a simpler thing if you're 3 4 doing a recount and assessing this from a local election 5 that -- but are there any concerns that if you are dealing with 6 a statewide or much larger -- a Congressional election covering 7 a lot of different types of polling circumstances that you have 8 a -- I realize that you are saying we're just testing the 9 scanners we're using for the recount. But is there any chance that it makes a difference 10 about where these ballots are coming from? 11 12 MR. RAYBURN: So each county is going to have to do 13 this test on their own equipment. So it is kind of divided up 14 by county. 15 THE COURT: Okay. MR. RAYBURN: So if there is a multijurisdictional --16 17 let's say a Congressional district. Every county in that 18 district is doing this mini audit on their equipment. Each of 19 them are picking at least four ballot boxes from their portion 20 of the ballots that were cast for that race and testing the 21 equipment against that test deck. 22 THE COURT: Okay. All right. That is helpful. 23 Thank you very much. 24 MR. TYSON: Your Honor -- I'm sorry.

All right. So we had some -- I know we

THE COURT:

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just sort of plunged into a direction. I didn't know where we were going at all.

So let me just go back to the questions that I originally asked as well. And I'm assuming that you are going to be answering a lot of these.

MR. RAYBURN: Yes, Your Honor.

THE COURT: So the first question was, what is the status of the State Election Board rules on precertification tabulation audits required under OCGA 21-2-498? What is the expected date of notice and comment on those proposed rules?

I know that you said everything is in process. Do you have a projected date though?

MR. RAYBURN: Not a date certain. I think the earliest possible date would be the April 15. But I think that would be a very tight time frame. With the March PPP election coming up and that very large audit that we're going to do in Fulton, that is going to be very informative. And I think that is going to largely drive a lot of the tweaks to these draft rules.

We have a working group made up of State Election Board members, county election officials, and Secretary of State staff that is reviewing and fine-tuning rule drafts before they are presented to the State Election Board.

And so this would go through that process as well to make sure -- especially the State Election Board members,

1 Secretary of State staff, and counties are all in agreement 2 that this is something that will work and is feasible. then it would be presented to the State Election Board for 3 4 posting, if they approve posting it, for public comment, going 5 through that period. And I know this will be of great 6 interest. So we'll probably get very good public comment that 7 might require further revisions. 8 THE COURT: When you say very large, can you give us 9 an idea of how large that is? 10 MR. RAYBURN: Oh, so looking back at 2016, I want to 11 say there was 177,000 votes cast. This potentially could be, you know, a good bit more. We've registered a lot more people 12 13 here in Georgia. We have larger population. There is a lot of 14 interest in this democratic presidential preference primary. 15 So it could be more than 200,000. 16 THE COURT: And the audit itself would be in that 17 range you are saying? 18 MR. RAYBURN: So the audit that we are preparing to

MR. RAYBURN: So the audit that we are preparing to conduct in Fulton is called a ballot polling risk-limiting audit. I would be happy to talk about that in more detail,

21 Your Honor, if you would like.

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THE COURT: Well, the question was really: When you think about 200,000 people casting a vote, which is the number I heard, what percent -- I'm just trying to understand what the percentage would be likely audited. Are you talking about

200,000? Are you talking about some other number? That is what I didn't know.

MR. RAYBURN: Sure. So with a ballot polling risk-limiting audit, the sample size, the percentage of ballots you are looking at, actually depends on the margin of victory.

So if the winning candidate has 20 percentage points more than the second highest most vote receiver, then the sample size goes down. If it is a very close election between first and second place in Fulton County -- and that might actually cause it to be rather large. With a ballot polling risk-limiting audit, it fluctuates based on that margin. So that margin is the unknown right now where we are today that will dictate the percentage.

It could be one percent of the ballots cast. It could be a good bit more than that. It just depends on the margin. If we were to do, for example, a batch comparison, you often see one percent, three percent, and in a really close election maybe five percent of the ballots cast are looked at.

One of the advantages of a risk-limiting audit is that they are supposed to be more efficient. You are supposed to be able to look at fewer ballots and still have confidence that the outcome was correct.

MR. TYSON: Your Honor, as far as the time line goes, I believe we have determined that July, August is the latest that the rule could be promulgated to be effective for the

November election.

So in terms of this program that the state is engaged in, there is kind of an outward limit of when the rule is going to have to be promulgated so there is time to notify county officials, to train people on the processes since these pre-tabulation audits will have to go into effect for November 2020.

THE COURT: I think many of the other questions here have been answered.

Is a visual image of each BMD ballot cast by votes being maintained by each county or the state?

MR. RAYBURN: Yes. So the instructions are for them to -- let me back up. Each tabulator has a memory card that is recording the vote tabulations, audit log, and the ballot images. That is where the images originally are because they are coming from that scanner tabulator.

On election night, those items are uploaded into the air-gapped election management system that is in each county. So they are physically plugged in to the computer. And that computer is not hooked up to the internet. And that is downloaded to that computer in each county.

So the counties are to keep a copy of all those ballot images that are on that computer. And then they will also -- before the state can certify, we do what is called a ballot run. Paperwork and a copy of that election database is

provided to the state. We gather that from 159 counties. So the state would also have a copy. So those will be preserved.

THE COURT: And, meanwhile, the physical ballots are -- each county is responsible for keeping preserved?

MR. RAYBURN: That is right. After the election is certified and, you know, any contest period has expired, those actual physical ballots, along with the tabulation sheets and voter certificates -- all that information actually goes under seal with the superior court clerk. And that is held for, I believe, at least 22 months.

THE COURT: I don't know whether you are the right person and probably are from what I can tell. But Question 3 of the ones I asked before -- and I still have that question when I looked at the election procedures that were distributed.

And this goes -- the question, again, just for the record was, the state's counsel addressed at the last hearing the state's preliminary plans -- and I will just say I recognize they were very preliminary -- for handling voter identified concerns regarding the accuracy or operation of particular BMD machines or ballot scanner/printers flagged during the voting process at specific precincts.

What is the status of those plans? What are the plans? Because when I looked at -- let's see -- the rules as to conducting elections -- and I'm referring to 183-1-12-.11, which is on the filing provided by the state at Document 717 --

it deals with recorded malfunctions and emergencies at Pages 10 and 12.

And -- but I couldn't see anything that was supposed to happen in particular other than the election -- the poll manager was supposed to call the superintendent and bring it to his or her attention immediately.

MR. RAYBURN: So what this rule says is that they are to document on a state-provided form the incident. So that incident -- that documentation would go to the county superintendents as the election materials are leaving the polling places. So the superintendent would have those.

Part of our ballot run where we gather copies of the county election paperwork, we expect that that document to also be provided to the state so that the state would have visibility, the county which runs the election has visibility over their equipment so that those incidents -- malfunction incidents are preserved and can be reviewed.

THE COURT: I guess the question really is -- maybe you view this as not relevant. But let's talk about the old machinery. Let's say that you -- or the sort of problem that was identified with a different system in Pennsylvania where -- that you're not anticipating because there's different technology.

But let's say that a particular machine keeps on -- you get one voter and then you get an hour later another voter

who says this is not producing my actual selections. And you correct it for that person, but it doesn't mean you correct it for everybody else.

When is the plug pulled on that machine essentially? This doesn't tell me that. You just document those two individuals. But they really perhaps should -- that is your flag at that point or the head of the precinct's flag. So that is -- just documenting it doesn't take care of all the people who might have voted on a machine that was not, in fact, properly recording.

MR. RAYBURN: Sure. So it is going to be a judgment call at the poll manager level in conversation with the superintendent. So there's certainly times where a voter might misremember as they mark. And so they may think it is a discrepancy when it is not.

And so the discrepancy form, the incident form, should document which particular piece of equipment the voter used, describe the incident because it is going to be important whether it is a printer jammed and my ballot smeared versus, as you describe, I know what I marked on that screen and it didn't print. Those are different things. And they need to be recorded differently.

And then the poll manager will make -- there is not a set threshold when it reaches this number. That is not currently the rule. It is -- what it says is significant

number, and it is a judgment call that the poll manager has to make.

And there is authority though for them to shut down that machine and for it not to be used. So the point of this is to document it. That machine could be reviewed. The audit log can be reviewed to determine what was happening inside that machine.

And Paragraph 11 is the provision that talks about being able to shut down the machine.

THE COURT: All right.

MR. RAYBURN: But, Your Honor, it is a balance.

Because when you shut down a machine, now you've reduced your capacity. So that is why I think it needs to be a judgment call. The poll manager needs to assess the situation, almost kind of interviewing a witness. You are talking to this voter and trying to understand what experience they had. So that is why I think the State Election Board went this route.

And it also interplays with other parts of the rule where the poll workers at every ballot scanner are asking the voters to review their ballots. So if there is a recurring problem with a particular machine, it should be -- this should appear more -- you know, quite often. And it would be readily apparent if there is a significant issue.

THE COURT: So in 11(b) when it says, when the ballot scanner malfunctions, the voter shall place their voted ballot

in the emergency bin, that is going to be run by -- by some other scanner later on; is that right?

MR. RAYBURN: Yes. So if the issue with the scanner that is on the ballot box -- if that keeps ballots from being able to be scanned, they use the emergency bin. If it can be resolved -- let's say it was a paper jam. You want people to keep moving. So all right. We're going to transition to the emergency bin until we can clear the paper jam. Once that is cleared, poll workers at the end of the poll day can scan their ballots there at the precinct level.

If that particular scanner cannot be fixed at the polling place, they would be taken to the central office and scanned centrally.

THE COURT: All right.

MR. CROSS: Your Honor, could I ask a quick question on 11(b) that you were just on?

THE COURT: Yes.

2.2

MR. CROSS: If the ballot scanner is found to malfunction, it says that ballots can go in the emergency bin and then those will be scanned later. What about the ballots that were already scanned by that scanner? What happens with those?

MR. RAYBURN: So the ballots that are rescanned are in the ballot box, and they are in a different compartment. So they are separated from the emergency bin. So those ballots at

the end of the day would be removed. We would also run a tape, if you can, from that central scanner.

And so you segregate those two ballots. You have the ballots that have already been tabulated. They go into a ballot box. You have to keep those emergency bin ballots separate so they can be retabulated.

If -- once you take all the election equipment to the central office, you have that memory card in hand. And they attempt to physically attach it to their election management system and download the results, the ballot images. If for some reason that card does not have those ballots -- it has been damaged, whatever -- it depends on the malfunction -- then they can rescan those ballots -- both sets of ballots at this point and then retabulate them.

MR. BROWN: I have a follow-up question to that, Your Honor.

If there are complaints with respect to a particular machine toward the end of the day after, say, 200 votes have been cast on that machine, what happens to the votes that were cast? Are those counted or not counted?

And what if -- in follow-up to that, what if it is sporadic instances of complaints on all of the machines or not defects, just people reporting defects? Maybe they are telling the truth. Maybe they are not.

How do you know if the voter is telling the truth

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1
    when they are complaining about their vote? And if you can't,
 2
     couldn't a relatively small number of people force a new
     election just by complaining that the BMD did not accurately --
 3
 4
               THE COURT: That's a lot of questions. Let's start
 5
    with the beginning one.
               MR. TYSON: Mr. Brown, are you talking about the
 6
 7
     optical scanners or the ballot-marking devices? You said the
 8
    machine records the votes. The ballot-marking devices don't
 9
     record the votes.
               MR. BROWN: That leads me to about six other
10
11
    questions.
12
               THE COURT: All right. Let's take five minutes of a
13
    break, and you get your questions -- Mr. Brown, just
14
    consolidate them so that we have a clear record of what that
15
     is.
16
               I mean, we're going fine on time -- because it is not
17
    the way I thought it was going to be. But that is fine.
18
               MR. RUSSO: Your Honor, I just want to point out that
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    Mr. Sterling and Dr. Coomer, on the phone, may be able to also
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     answer some of these. I believe Dominion is going to have at
21
     least one technician in every county. So --
22
               THE COURT:
                           That would be great.
23
               MR. RUSSO: I don't know how long we will have Dr.
     Coomer. But we do have him for now.
24
25
               THE COURT: So tell me what Dr. -- maybe when you
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1 come back, you can tell us what each of them would best be able 2 to address so that we use our time wisely. All right? And I really do mean five minutes. I probably will 3 4 stay here because I'm the worst offender. 5 All right. So, Mr. Brown, if you could relay what 6 your question is also to them in advance when you -- or your 7 three or four questions together, that would be useful. All right. I'll see you in five minutes, 25 of 4:00. 8 9 COURTROOM SECURITY OFFICER: Court stands in recess. 10 (A brief break was taken at 3:33 P.M.) 11 THE COURT: All right. So has Mr. Brown relayed to 12 Mr. Rayburn the questions? 13 MR. TYSON: Yes, Your Honor. I think we 14 significantly consolidated the question-and-answer portion 15 here. 16 THE COURT: Good. 17 MR. BROWN: As we discussed, if a ballot-marking 18 device late in the day -- late in the day, let's say, starts 19 having a lot of complaints such that it should be taken out of 20 service, my understanding is that all of the votes that had 21 been cast up until that time would be counted in the election 22 anyway; is that correct? 23 MR. RAYBURN: So once a paper ballot goes into the 24 scanner, it is accepted by the scanner and drops into the

It is cast. And you cannot trace that ballot back

25

ballot box.

to an individual ballot-marking device or an individual voter or anything. So you would not be able to later take that out and say not to count the ballot. It is counted.

MR. BROWN: Thank you. And then there is really no way to tell -- since there is no way to tell whether a voter is telling the truth about whether his or her ballot was accurate, the system is vulnerable to fake complaints about the accuracy of the system; correct?

MR. RAYBURN: I think every election would be vulnerable to fake complaints.

MR. BROWN: And with the BMDs, malicious actors could shut down a number of different BMDs if they were coordinated and complained a lot about the outcome -- correct? -- in ways that they couldn't do with hand-marked paper ballots?

MR. RAYBURN: I don't think it would be different. I think malicious actors can dump paper on a stack of hand-marked paper ballots and keep elections from being conducted. So a malicious actor is going to do what they do. And it breaks the law, and they are taking that risk.

But we have -- a lot of this equipment, it is a judgment call. That is why, you know, the poll manager has to make that decision based on the complainant.

MR. BROWN: We discussed this also during the break. The logic and accuracy testing that you described is vulnerable to what is called the dieselgate kind of malware --

1 THE COURT: All right. You know, I really didn't 2 anticipate you going that far, frankly. I mean, I'm sure that there are a host of other questions that one could ask. 3 4 the plaintiffs might want to, if I conducted a full hearing. But this is what I was interested in. 5 6 Thank you, Your Honor. MR. BROWN: 7 MR. TYSON: Your Honor, one question we haven't 8 covered related to your question about the 90-day report on the 9 pilot program. 10 THE COURT: Right. MR. TYSON: And I think -- I believe Mr. Rayburn has 11 12 explained adequately. It is a program. It is not a single 13 So it has not been triggered yet to provide that 14 report. And that will be coming at a later point. 15 Am I saying that right? 16 That is right. MR. RAYBURN: 17 MR. TYSON: Okay. I just wanted to make sure we had 18 that clear in the record. 19 And then Dr. Gilbert and I know the folks --20 THE COURT: So does that mean though 90 days after -for instance, if the Fulton County audit is the penultimate 21 22 one, 90 days after that or --23 MR. RAYBURN: If it is. But the next iteration of 24 our due diligence would be to do multicounty. Then the final 25 kind of true test and possibly in July if we have a

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1
     statewide -- for example, democratic senate primary runoff,
 2
     that would be a great opportunity to do something statewide.
 3
    And that would be the best then to do a comprehensive report
 4
     from.
 5
               THE COURT: All right. Okay.
               MR. TYSON: And then, Your Honor, Dr. Gilbert and I
 6
 7
     know the folks from Dominion are under some time constraints.
     Dr. Gilbert is at a conference.
 8
 9
               So if there are specific questions for them, it might
    be good to cover those and return. I think we have covered
10
11
    most of Mr. Rayburn's topic areas.
12
               THE COURT:
                           All right.
13
                           Your Honor, could I ask just two very
               MR. CROSS:
14
     discrete questions of Mr. Rayburn before he --
15
               THE COURT: But he is not going to be leaving.
               MR. CROSS:
16
                           Oh, okay. All right.
17
                           I don't think. I think he is here for
               THE COURT:
18
     the duration.
19
              MR. CROSS: It looks like he was running away, as I
20
    would if I were him, in fairness to him.
               THE COURT: I do have -- Mr. Rayburn, when did you
21
22
     join the department?
23
               MR. RAYBURN:
                             July 2016.
24
               THE COURT: And you have been in the same capacity
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throughout the time? I just haven't seen you before.

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               MR. RAYBURN: I have been in the back watching.
 2
               THE COURT: I'm so sorry that I didn't see you or
 3
    hear from you before. Thank you.
 4
               So the question was about the state contract -- who
 5
     is creating the ballot. And I don't know whether that is --
 6
    whether they are involved in that question. Obviously,
 7
     Dr. Gilbert is not.
 8
               MR. RUSSO: Yes, Your Honor. I think the two people
 9
     that would be best would be Dr. Coomer and Gabe Sterling on the
     contractors. And then I think it kind of also ties into your
10
11
     second question from the March 2nd order about the systemic
12
    modifications.
13
               THE COURT:
                           All right. So if you are trying to use
14
    your person on the phone, why don't we start with them.
15
               MR. RUSSO: Dr. Coomer would be best.
16
               THE COURT: All right.
17
               MR. RUSSO: I suppose he can hear us.
18
               DR. COOMER: Yes. This is Dr. Coomer. I can hear.
19
     I wasn't sure if there was a specific question or if it was
20
    more of a general question.
21
               THE COURT: Does he have these questions in front of
2.2
    him?
23
               MR. RUSSO: Yeah. Dr. Coomer, do you have -- I don't
24
     think -- you do not have the order in front of you that set out
25
    the questions about the state contractor. But I can just read
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1
     them --
 2
                           Thank you. I'm looking for
               THE COURT:
 3
     Dr. Coomer's --
 4
               MR. RUSSO: -- if that is easiest.
 5
               THE COURT:
                           That would be fine.
               MR. RUSSO: Dr. Coomer, are you familiar with the
 6
 7
    ballot-building process?
 8
               DR. COOMER: Yes, I am.
 9
               MR. RUSSO: And the question from the order -- the
     first one is -- I'll just go through it quickly, and we can
10
11
    clarify --
12
               THE COURT: Dr. Coomer is director of product
13
     strategy and security for Dominion Voting Systems; is that
14
     right?
15
               DR. COOMER: That's correct.
16
               THE COURT: All right.
17
               MR. RUSSO: And, Dr. Coomer, who -- well, could you
18
     let us know -- is Dominion doing the ballot-building process?
19
               DR. COOMER: Yes. It is 100 percent Dominion
20
     employees. For the current election, it is actually one
21
                                She has done all of the ballot
     employee,
22
    programming for all 159 counties.
23
               MR. RUSSO: Okay. And are there any -- are there
24
     any -- is there anyone who is modifying the ballots at the
25
    county and precinct level use?
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1 DR. COOMER: No, there is not. 2 MR. RUSSO: Okay. And what security measures does 3 Dominion take to protect against the threat of intrusions 4 during the ballot-building process? DR. COOMER: So all of the -- all of the ballot 5 6 programming is being done on-site in our warehouse. 7 done in a secure area. So the warehouse itself has physical 8 security. Everybody has a photo badge. There is an electronic 9 key access into the building. 10 The actual work station where the ballot programming is done is in a separate locked room, which 11 has 12 access to, as well as a couple other of the senior project 13 managers. 14 The main computer server where all the data is stored 15 is actually in a secure server room, which even 16 does not have access to. That is only accessible by the senior 17 project managers. 18 All of the areas are under 24-hour camera 19 surveillance. There are also 24-hour camera surveillance 20 externally to the building as well. 21 MR. RUSSO: And you mentioned that is the only person doing the ballot-building process for the 22 23 presidential preference primary? 24 DR. COOMER: That's correct. 25 MR. RUSSO: How many -- if you know, how many people

will be doing it for the May primary?

DR. COOMER: Likely two to three. Again, these are full-time Dominion employees. There is not any contractors that are involved in the process.

Obviously, one person doing 159 counties was quite a workload. So we're hoping to spread that workload a little bit more across some people.

THE COURT: What do you anticipate -- this is the judge.

What do you anticipate will be necessary for the full election -- the general election?

DR. COOMER: The workload is about the same. And, actually, because this was the first full election, a lot of the base data has already been entered. So that can be reused. So the turnaround time will be much more efficient. And, like I said, I think we anticipate probably two to three ballot programmers.

MR. RUSSO: Was there any data that was taken from the old -- the old GEMS system that was used in the ballot-building process?

DR. COOMER: No. No. All of the data that is in the current system was keyed in by hand from original source documents, being Excel spreadsheets or Word documents. And that was all hand keyed directly into the new system. There was no data extracted or reused from the prior system.

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1
               MR. RUSSO: And I might have missed this answer.
                                                                 But
 2
     did you say that there were any modifications that would be
    made at the county level?
 3
 4
               DR. COOMER: No, no modifications at the county level
 5
    to the ballot.
 6
               MR. RUSSO: So once the ballot is built, it is
 7
     complete from Dominion?
               DR. COOMER: That's correct. Correct.
 8
 9
               MR. RUSSO: And does Dominion conduct background
10
     checks on its employees?
11
               DR. COOMER:
                           Yes.
                                  So we do initial background checks
12
     on hire, including criminal background checks, as well as
13
     financial backgrounds, credit checks. And we are implementing
14
    a yearly annual background check process as well currently.
15
               MR. RUSSO: Your Honor, I think this might have
16
    gotten through all of the questions you had on Number 2.
17
    mean -- excuse me -- on Number 1.
18
               THE COURT: So I want to just make sure I understand
19
     that the -- any type of modification needed for particular
20
     local races your ballot builders are responsible for?
21
               DR. COOMER: Yes. That is correct.
22
               THE COURT:
                           Once you are through with developing the
    ballot, what happens then? Is it -- it is going to the state?
23
24
     It is going to the counties? Where is it going? And how is it
25
    going -- being transmitted?
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DR. COOMER: So when Dominion is complete with the project, it is my understanding that we deliver that on secure removable media. It is basically an external hard drive. We deliver that directly to the state by hand. We do not transfer anything electronically. We're not using any FTP sites for data transfer or anything like that. It is literally walked over to the state and hand delivered. And these are password-protected, encrypted drives.

THE COURT: And do you have -- does Dominion have any responsibility in any way for interface between your software, your equipment, and the server equipment that is -- and connectivity at the local, county, or precinct level?

DR. COOMER: No. All the fielded systems are air-gapped. There is no electronic means of communication between any of those systems.

THE COURT: But does Dominion itself have any -- any engagement or relationship with the rollout on a local level as opposed to with the state staff, or is that something -- go ahead.

DR. COOMER: We certainly assisted in configuring and installing the equipment and verifying that everything was installed according to certification guidelines.

THE COURT: All right. And I do understand that Dominion has equipment and software that is being used in a host of other places.

But what other places has a statewide system with your software and this configuration?

DR. COOMER: So we do have statewide implementation in Louisiana, and we are currently installing a statewide implementation in Alaska.

THE COURT: And the Louisiana one dates back to what time?

DR. COOMER: Mike can -- Mike Frontera can probably answer that better than I can. But under various prior companies that have been acquired by Dominion, this goes back into the early, I believe, 2000s.

Is that right, Mike?

MR. FRONTERA: Yes. So in the state -- Your Honor, this is Mike Frontera, general counsel for Dominion.

In the State of Louisiana, that contract goes back to a company called Sequoia Voting Systems, and it was assigned to Dominion as part of an asset transfer from Sequoia to Dominion. It goes back to ultimately the late '90s. It was revised in 2005 with another major revision in 2011.

That is inclusive of a very similar system that is being used in Georgia for both central counts and for early voting. And we continue to use kind of a hybrid of legacy equipment in the State of Louisiana, as well as newer equipment similar to what is being used in Georgia.

THE COURT: Thank you. All right. Is there any

further --

DR. COOMER: Sorry. We also have a statewide contract in New Mexico. It is hard to remember all of the accounts that we have.

THE COURT: And is it for comparable equipment and software?

DR. COOMER: It is similar. They use slightly different voting terminals. But all of the back-end and tallying equipment and recording infrastructure is the same.

MR. FRONTERA: And, Your Honor, this is Mike again.

One other that just comes to mind and to Dr. Coomer's point,

sometimes it is hard to remember them all. But in the State of

Colorado, which I am in, we also have a statewide contract.

And the system is very comparable, albeit a little different

flavor in terms of how voting is done. But it is similar to

the system that is used in Georgia.

THE COURT: Colorado has a large amount of people -they have -- you can mail out the vote, don't you? Don't they
have a huge -- don't they send out the vote to everyone so that
you can use -- by hand?

DR. COOMER: Colorado is predominantly vote by mail. But since they went to same day registration, they do have a portion that vote in person on the ballot-marking devices. It is somewhere between five and ten percent depending on the election.

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1
                                  Thank you. All right.
               THE COURT:
                           Okay.
 2
               MR. RUSSO: Your Honor --
 3
               THE COURT: Were there any other questions that are
 4
     really related to the ones -- the limited area that he has
 5
     covered from plaintiffs' counsel?
 6
               MS. KAISER: Your Honor, we just have one follow-up
 7
     question. Sorry. This is Mary Kaiser for the Curling
 8
    plaintiffs. Just one follow-up question.
 9
               Dr. Coomer, have you personally done any examination
    of the system, the servers and computers, that are being used
10
    to build the ballots for the Georgia system?
11
12
               DR. COOMER: I have not been on-site in Georgia, no.
13
               MS. KAISER:
                           Thank you.
14
               THE COURT:
                           Who is the person responsible in Georgia?
15
               MR. RUSSO:
                                         , Your Honor.
16
                She would be -- we would try to get her here today.
17
    But she is in the ballot-building process now.
18
               THE COURT: That is fine. I understand. And
19
    Mr. Brown?
20
               MR. BROWN:
                           This is Bruce Brown, sir. Just one
21
     follow-up question to your comment that all data was being hand
22
     keyed into the new system.
23
               That wouldn't include the 7 million records of the
24
     voters that is used through the e-pollbooks and tied into your
25
    system, is it?
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1 DR. COOMER: No. No. We do not have any part in the 2 voter registration end of the system. 3 MR. BROWN: But your e-pollbooks are -- all that 4 feeds the e-pollbooks that you do use; correct? 5 DR. COOMER: Yeah. And to be clear, the e-pollbook 6 is -- that is a contracted third-party system. That is not a 7 Dominion-owned product. 8 THE COURT: So you-all aren't responsible then for 9 the e-pollbook? Is that what you are saying? 10 MR. FRONTERA: Well, this is Mike. I can answer that 11 question. 12 So as part of the Georgia contract, we do have a 13 subcontractor for the e-pollbook. And for particular clarity, 14 because there was a word used that is not accurate in terms of 15 linked to our system, there is no link between the e-pollbook 16 and our system. 17 The e-pollbook is based on the fact that the voter 18 activates a card that ultimately tells the voting unit what 19 ballot style, i.e., what precinct, what party, et cetera, that 20 that voter should be presented based on their voter 21 registration. There is no direct link of voter registration 22 23 information or otherwise between the two systems. It is only 24 the activation of a card that brings up the appropriate ballot.

THE COURT: All right. But I guess what my question

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1
     was focused on: This is a subcontractor of Dominion's, and
 2
     really the subcontractor you are saying is wholly responsible
     for the programming, the integrity of the data, et cetera?
 3
 4
               MR. FRONTERA: So, ultimately, Dominion is
 5
     responsible because we are the prime contractor, for clarity.
 6
     However, from a technology standpoint, it is a completely
 7
     separate system.
                       That is what I wanted to make clear.
 8
               THE COURT: Slow down when you are talking because
 9
     the court reporter is having trouble getting your words.
10
               I understand that you are saying legally you are
     ultimately responsible. But I'm asking in terms of
11
    pragmatically is it -- the subcontractor, remind me, is who?
12
13
               DR. COOMER: The subcontractor is KnowInk.
                                                           That is
14
    K-N-O-W.
15
               THE COURT: But KnowInk is responsible for delivery
    of this product; is that right?
16
17
               DR. COOMER: Correct.
18
               THE COURT: And is responsible for basically ensuring
19
     its functionality and accuracy; is that correct?
20
               MR. FRONTERA:
                              That's correct. But we do work with
     them closely because of the installation and the practicalities
21
22
    of the installation. But they are ultimately responsible for
     the intellectual property and the technology that is being used
23
     in Georgia for pollbooks.
24
25
                           So just -- I think that what their -- the
               THE COURT:
```

question really relates to the interphase between what happens
with the Dominion system and your system.

And as I understand it, that when the card is -- when somebody goes in and their information hopefully is identified, that it is going to pull up the correct ballot?

MR. RUSSO: Your Honor, I can maybe help a little bit here. Yeah. That, I think, is partially right. But the Poll Pads that are used for check-in, those are used for -- it doesn't matter whether you are voting a paper ballot or if you are voting on a BMD. The Poll Pads are going to be the same Poll Pads, regardless.

THE COURT: Right. And they are going to be -- but it is a new company that is running --

MR. RUSSO: It is. That is true. It is a new company. But the -- there is no -- whatever type of vote anyone -- if we were all voting on hand-marked paper ballots and scanning them, it would be the same check-in process.

I don't want us to necessarily go too far off the path here with the voter registration system and the new scanning of the malware that they have put in place.

And I don't know if -- Dr. Coomer would probably not be the right person for that.

THE COURT: That is what I'm trying to find out, what his interaction with this is, because he says --

MR. RUSSO: That is right. So he probably would not

be the right person to talk about Georgia's voter registration system and that -- the process that they go through to run checks for malware and the third parties that they use -- the state uses to monitor that server.

THE COURT: I was just trying to get at what was the interface between Dominion's programs, ballot-building, its entire operation. Because something was suggested -- and I don't know what it was.

Can the Dominion representatives clarify where is the interface or what you do with KnowInk?

DR. COOMER: Yes, I can speak to that. Obviously we have to --

THE COURT: I'm sorry. Which person is speaking now?

MR. RUSSO: It is the general counsel.

DR. COOMER: I'm sorry. This is Dr. Coomer.

So from the ballot-building system, the project, we export essentially a mapping file that gives KnowInk information of what codes correspond to what ballot styles for the voter. So they import that mapping file into their system so that they know when they look up a particular voter and that voter lives in this -- you know, at this address, it corresponds to this ballot style. They know what code to put on the smart card that then activates the ballot-marking device to bring up the correct ballot.

MR. RUSSO: Those are what are hand input; correct?

```
1
               DR. COOMER: Oh, yes. Yes. Absolutely.
 2
               THE COURT: All right.
 3
                           Your Honor, could I make a quick request.
               MR. CROSS:
 4
     Dr. Halderman sent us an email and pointed out the name of the
 5
    person building the ballots -- we should strike that name from
 6
     the record because we don't want that person becoming --
 7
               THE COURT: We'll deal with that later.
               MR. CROSS: Okay. We just -- it is not a name that
 8
 9
     should be public.
10
               THE COURT: Let's deal with that sort of thing later.
               MR. RUSSO: We have no objection to -- we are just
11
     trying to provide you information.
12
13
               MR. CROSS: It is no fault. I just thought people
14
     shouldn't be using -- we don't want to continue to use the
15
     name.
16
               THE COURT: We'll deal with it later. All right.
17
    All right.
18
               MS. KAISER: Your Honor, may I ask just two quick
19
     follow-up questions of Dr. Coomer about the machines on which
20
     the ballot-building is done?
21
               THE COURT: Yes.
22
               MS. KAISER: Dr. Coomer, are those machines ever
23
     connected to the internet?
24
               DR. COOMER: Absolutely not.
25
               MS. KAISER: And is there ever removable media
```

```
1
    plugged into those computers?
 2
                           Yes. As I stated, that is how we
               DR. COOMER:
 3
     transfer the project data to the state. So these are -- it is
 4
     a particular encrypted hard drive that we use. It is
 5
    password-protected.
               MS. KAISER: Are those hard drives ever connected to
 6
 7
     a machine that is connected to the internet?
               DR. COOMER: No.
 8
 9
               MS. KAISER: Thank you.
10
               MR. RUSSO: Dr. Coomer, those machines are new
11
    machines; is that right?
12
               DR. COOMER: Yes, it is.
13
               THE COURT: Anything else for Dominion's
14
     representatives while they are on the phone relating to this
15
     subject?
16
               Thank you.
17
                           Thank you. We have Mr. Sterling here.
               MR. RUSSO:
18
               THE COURT: Yes. Go ahead.
19
               MR. STERLING: My name is Gabriel Sterling.
20
     G-A-B-R-I-E-L S-T-E-R-L-I-N-G. I'm the statewide voting system
21
     implementation manager for the Secretary of State's office.
22
               MR. RUSSO: And Judge Totenberg had started asking a
23
     little bit about the process that occurs after the ballots are
24
    built and how they are transmitted to the counties.
25
               Can you just walk us through that process?
```

MR. STERLING: So I can pick up from when the

Dominion representative brings the data over to our Center for

Elections. It is then put on to our air-gapped EMS, which is

also all new equipment.

COURT REPORTER: Could I ask you to slow down a

little bit and speak up.

MR. STERLING: This is going to be hard for me. I

MR. STERLING: This is going to be hard for me. I talk fast. I will work hard not to do that.

THE COURT: If it goes a little closer to you, it might go higher too. It is moveable. But you are welcome --

MR. STERLING: I have got a lot more gray hair now than I did about six months ago.

So what happens is it comes into our office. And then our team would take it and provide the specific USB drives to the counties. What they do is they take them. They put them in a bag that is marked for the county. We have a key. We lock it. And the county has a unique key to then unlock it on their side. So we FedEx that to them. They have to unlock it with their unique key.

THE COURT: It is only because we are hearing this information and may not completely have a portal for it ourselves. So just go -- go slower.

So, again, you said, our team would take it and provide the specific USB drives to the counties. And then you would provide it to them in what -- you would drive it there?

Would you --

MR. STERLING: I was about to say we take that sealed bag. We then put it into a FedEx. That FedEx is then overnighted to the county. They receive it. They would have to have their unique key to then get back into that bag.

Once they do that, they have to call back to the Center for Elections to get the password for that password-protected drive. They put it into their air-gapped election management system at their office. And that is how they get the ballot combinations for their ballots.

MR. RUSSO: Those are new systems that they are putting in?

MR. STERLING: Everything is new. There is nothing left over from the old. There's new screens, new keyboards, new mice. Everything is brand-new.

THE COURT: New computers?

MR. STERLING: New computers. And the Dominion techs were there to help assure that everything is air-gapped and put in properly because we have a tech in every single county. And in larger counties, we have multiple techs. And there's regional techs that manage those techs.

So we have Dominion people who are there on-site with each county to make sure this is done properly while we're in this learning process.

MR. RUSSO: So one of the questions that was asked is

1	what systemic modifications and changes have been made on a
2	county level to server equipment and connectivity in the last
3	year. I think you can you speak to that?
4	MR. STERLING: Considering the main thing is that
5	modifications are necessary because all of the stuff that was
6	with the old GEMS system is now gone and in storage. So there
7	is nothing left to modify. Everything there is new.
8	And like I said, with the election supervisors and
9	the Dominion techs and their teams, they have installed all new
LO	equipment that is air gapped. So there is no need to make
.1	modifications on that front.
L2	MR. RUSSO: I think that answers the second question,
L3	Your Honor. And I'll see if I have anything else for you.
L4	(There was a brief pause in the proceedings.)
	MR. RUSSO: I don't have anything else for
_5	
	Mr. Sterling that Dr. Coomer didn't cover.
L 6	
L6 L7	Mr. Sterling that Dr. Coomer didn't cover.
L6 L7 L8	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel?
L6 L7 L8	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel? MR. BROWN: Just one question, Mr. Sterling. This is
L6 L7 L8 L9	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel? MR. BROWN: Just one question, Mr. Sterling. This is Bruce Brown.
L6 L7 L8 L9	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel? MR. BROWN: Just one question, Mr. Sterling. This is Bruce Brown. The counties still have the same PCs that they had
L6 L7 L8 L9 20 21	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel? MR. BROWN: Just one question, Mr. Sterling. This is Bruce Brown. The counties still have the same PCs that they had before the new system that are hooked up to the internet with
L5 L6 L7 L8 L9 20 21 22 23	Mr. Sterling that Dr. Coomer didn't cover. THE COURT: Were there any questions from counsel? MR. BROWN: Just one question, Mr. Sterling. This is Bruce Brown. The counties still have the same PCs that they had before the new system that are hooked up to the internet with the election night software on it so that that is how it is

Ιf

1 your back is to me. 2 I'm sorry. Are you referring to the EMS MR. RUSSO: 3 servers -- the new EMS servers or old computer equipment? 4 MR. BROWN: I'm talking about the old computer 5 equipment that was in counties before with the -- you know, 6 that is just connected to the internet. Those are still there, 7 and those are the computers that communicate with the Secretary 8 of State; right? 9 MR. STERLING: The Election Night Reporting Scytl system is when we take -- when we get the election night 10 reporting done, that data will be taken off the air-gapped 11 12 system and then put onto the -- whatever computer they have 13 that can upload the tallies that are unofficial tallies to the 14 Scytl system, which then loads into the state reporting system 15 after we verify that that is the correct upload. 16 We don't have any transparency -- they could have new 17 I haven't been to 159 counties to check for certain computers. 18 yet. But that system remains in place as it was previously. 19 But also Election Night Reporting, on that front, all 20 the actual ballot-building and actual tabulation equipment is 21 all air gapped from that front. So if there were malware on the old 22 MR. BROWN:

MR. STERLING: I'm not a fully technical person.

system infected by the DREs, it would still be there?

I'm not sure I'm the best person to answer that question.

23

24

25

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1
     there is a malware designed for a DRE, I don't know if it does
 2
     anything else different. So I'm not really the person to get
 3
     into that.
 4
               MR. RUSSO: Y'all use new -- the USBs are all new?
 5
               MR. STERLING:
                              The USBs are all new.
               MR. RUSSO: So those aren't -- and after an election,
 6
 7
     what happens with those USBs?
 8
               MR. STERLING: Well, actually, I don't know if we are
 9
     fully satisfied yet. We think we will take the USBs and give
     them replacements on some of those. And we'll store those like
10
11
    we do with the CDs now. I know there's some people in our
12
    office who would prefer to burn everything onto a CD. But that
13
    particular process has not been fully vetted out yet.
14
               MR. RUSSO: I think what Mr. Brown is asking
15
     ultimately about is is there a USB stick going back and forth.
16
    And it sounds like what you are saying is a USB comes out and
17
    goes in and reports and then it is done?
18
               MR. STERLING: It should not be used again. Correct.
19
               THE COURT: But you are working out that part of the
20
    process?
21
               MR. STERLING:
                              The final steps, yes.
22
               MR. RUSSO:
                          Right.
                                  So if it would be used in a
23
     future election, what you are saying is it would be either you
     are going to get a new one or you are going to get -- I guess
24
25
     you would have to format it or something?
```

1 MR. STERLING: Something along those lines. We don't 2 know the answer just yet. MR. RUSSO: And that is the same process that would 3 4 occur with the hand-marked paper ballot? 5 MR. STERLING: If we had a hand-marked paper ballot 6 system, we would have the exact same upload process, yes, from 7 the same -- the EMS would tally the votes the same way, and you 8 would have the same upload with the hand-marked paper ballots. There would be no difference from either one of those systems 9 going into the Scytl upload for Election Night Reporting. 10 11 MR. RUSSO: That is because the tabulators for both 12 of them are the same? 13 MR. STERLING: Are the same, correct. 14 THE COURT: I want to make sure I understand the 15 significance or lack of significance of this. You have -- your 16 new computers tally the vote. And you put -- so those are 17 separate and apart and are at least supposedly pristine. 18 then you have -- you basically are going to transfer the data 19 from those in through -- I can't recall what you said. 20 MR. STERLING: A jump drive. 21 THE COURT: A jump drive. And you are bringing it 2.2 over to the --23 MR. STERLING: The outward facing machine. THE COURT: -- the old machine, the ones that are in 24 use, to be able to transfer that data to the state at that 25

1 point? 2 MR. STERLING: Correct. 3 THE COURT: To the Secretary of State's office for 4 the Election Night Reporting? 5 MR. RUSSO: That is just the reporting piece. 6 not -- that is not the official vote counting. 7 MR. STERLING: Correct. 8 THE COURT: And is the official report when they have 9 the State Patrol bringing information in -- is that coming from the -- the new computer -- the so-called new computers? 10 11 MR. STERLING: That is coming from the pristine, new 12 Dominion EMS. 13 MR. RUSSO: But, again, so you have the BMD that has 14 the paper ballot. We have the hand-marked paper ballot. 15 tabulators are the same for both of those. And it is the 16 tabulator that then tabulates and goes into that ENR. 17 MR. STERLING: As Mr. Rayburn went into, you take the 18 memory card from that and that is what is put into the EMS to 19 do the overall tabulation of the entire county's results. 20 take the memory card from the tabulator, which is the polling 21 place scanner from each of the precincts. You bring those into the county -- to their single EMS. And that is where they are 22 23 tabulated and then tallied together. 24 THE COURT: Their single new -- supposedly new 25 computer EMS?

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1
               MR. STERLING: Correct.
 2
               THE COURT: They are tabulated then and --
               MR. STERLING: They are tabulated on the precinct
 3
 4
     scanner. They are tallied into the EMS.
 5
               THE COURT:
                           They are tallied. And then you are going
 6
    to get a jump drive that is going to contain the tally --
 7
               MR. STERLING: Uh-huh (affirmative).
 8
               THE COURT: -- and bring it over to another garden
 9
    variety computer or server and send that data up for Election
    Night --
10
11
               MR. STERLING: -- Reporting.
12
               THE COURT: Informal reporting or unofficial
13
     reporting?
14
               MR. STERLING: Unofficial results.
15
               MR. RUSSO: Then they will decide whether -- they
16
    will decide whether they are going to get new USBs for the next
    election or whether they will format those and use them.
17
18
               MR. STERLING: To reinforce Mr. Russo's point, it is
19
     the same process whether it is a hand-marked paper ballot or a
20
     BMD-produced ballot.
21
               THE COURT: All right.
22
               MR. RUSSO:
                           Should we go to Dr. Gilbert next?
23
               THE COURT: You know, the thing is is Dr. Gilbert --
     I think I went through the questions posed by the assertions in
24
25
     some of -- that Dr. Gilbert made.
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1
               The only one that I think was not completely covered
 2
     was -- and I don't really want to quibble with Dr. Gilbert,
     frankly -- is his statement that the human readable portion of
 3
 4
     the paper ballot printout is the official vote record. And he
 5
     says the human readable portion of the paper ballot printout
 6
    controls in any recount.
 7
               And I guess just going backwards, I'm not --
 8
     Dr. Gilbert, your understanding here is one you had in what --
 9
     you filed this -- the affidavit is from November?
10
               MR. RUSSO: I'm going to let -- Mr. Miller's going to
11
     step in here.
12
               MR. MILLER: Thank you, Your Honor.
13
               Dr. Gilbert, are you still with us?
14
               DR. GILBERT: Yes, I'm here.
15
               MR. MILLER: Dr. Gilbert, the Court had posed a few
     questions to you in an order, Doc. 714, dated March 2, 2020.
16
17
               Have you seen that order?
18
               DR. GILBERT: I believe so. Let me look here.
                                                               I may
19
    have it.
              Okay.
20
               MR. MILLER: And, Dr. Gilbert, I believe Judge
21
     Totenberg just referred to a couple of those questions with
22
     respect to your statements regarding recounts and audits.
23
               Did you hear that question?
24
               DR. GILBERT: Yes, I did.
25
                            In your declaration, were you providing
               MR. MILLER:
```

1 a legal opinion as to the recount law in Georgia? 2 DR. GILBERT: No. MR. MILLER: And with respect to audits -- and I know 3 4 you heard Mr. Rayburn earlier today speak a good bit about 5 risk-limiting audits. Is it your understanding that in Georgia under a 6 7 risk-limiting audit procedure as contemplated that the human readable text would control? 8 9 DR. GILBERT: It is my understanding that whenever the human readable portion is used that is the appropriate way 10 11 to conduct an audit. 12 MR. MILLER: Because, more or less, it would not be 13 an audit if you weren't looking at the human readable portion; 14 right? 15 DR. GILBERT: I agree, yes. 16 MR. MILLER: Okay. 17 THE COURT: But I guess what I wanted to just get at 18 was there seemed to be some concern on the part of the 19 plaintiffs here regarding the limitation of -- limitations 20 imposed on what -- for recounts as to what -- what times and 21 what circumstances the human readable original ballot would be 2.2 looked at. 23 And I just -- since you haven't looked at the system, 24 I don't know how much you really -- what the scope of your 25 knowledge is. But you seem to indicate that you were

1 comfortable with the recount also because you could look at the 2 human readable -- because the human readable ballot would 3 always control. 4 I guess the plaintiffs would argue that is not always 5 It is only so in very narrow circumstances. But -- so all 6 I really want to know is what was the basis of your 7 determination that that human readable -- the human readable ballot would always control also in a recount. 8 9 DR. GILBERT: I believe that determination was made by House Bill 316, as I recall. I saw that prior to these --10 11 the information that was given today, obviously, I didn't have 12 that at the time I had written that. 13 THE COURT: Okay. So, really, when you are referring 14 to the human readable ballot here and the safeguard that it 15 provides, it being what controls, that is based on your review 16 of the statute? Is that the basis of your opinion? 17 DR. GILBERT: Yes. 18 THE COURT: All right. 19 MR. MILLER: Your Honor, if I may, just one or two 20 questions.

21 THE COURT: Sure.

22

23

24

25

MR. MILLER: Dr. Gilbert, with respect to the auditing procedure, that is a different type of process than a recount; right?

DR. GILBERT: That -- yes.

```
1
               MR. MILLER:
                           They achieve two different goals;
 2
     correct?
 3
               DR. GILBERT: From my understanding of how things
 4
     apply here, yes.
 5
               MR. MILLER: And, of course, you didn't intend to
 6
    provide a --
 7
               THE COURT:
                           Don't lead the witness. It doesn't help
 8
    me.
 9
               MR. MILLER: Sure. It is a little -- I apologize,
     Your Honor.
10
11
               THE COURT:
                           That's all right.
12
               MR. MILLER: Dr. Gilbert, just one question.
13
     recount is not governed by the human readable text as the Court
14
    has described, is it your opinion the Georgia BMD system is so
15
     unsafe that it cannot be used?
16
               DR. GILBERT: That is not my opinion.
                                                      I see it as --
17
    my understanding is that there will be audits, and there is a
18
    work in progress to define how that will be conducted.
19
    believe that the idea of just using a QR code -- again, that
20
     doesn't secure anything. But at the same time, the QR code is
     forensic evidence.
21
22
               To my knowledge, I haven't seen a QR code rewrite
23
     itself yet such that once it is written it is written.
24
     there is also the ability to examine the QR code and human
25
     readable portion to determine if they are a match. And that is
```

an infinite opportunity and that it can't rewrite itself. So that can be done at any time.

2.2

MR. MILLER: Your Honor, I don't have --

THE COURT: Let me just make sure I understand what you just articulated. You said just using a QR code doesn't secure anything. But at the same time, the QR code is forensic evidence and that you hadn't seen a QR code itself yet that -- and I wasn't clear what you meant here such that it is written -- it is as it is written -- that is what I was trying to understand.

DR. GILBERT: Yes, Your Honor. So what I'm getting at is, when the ballot is printed, it is written in paper and that once we have the QR code, if it doesn't match the human readable portion, that can be identified.

If you have hand-marked paper ballots that go through a scanner and you don't inspect it with your eye, the scanner could be giving you the wrong results. And you won't know. It is no different than if the QR code is flawed or if the scanner is flawed. In other words, the machine is giving you the wrong result. And you have to have human eyes inspect that in order to determine if the other machine and the scanner is giving you the correct result.

THE COURT: So would that mean you should be regularly during the course of the election checking whether it is giving you the accurate results or at the end -- what are

the implications -- I guess I'm trying to understand -- of that assessment on your part in practical terms?

DR. GILBERT: The implication is that I would support the recommendation that an audit is done on the human readable portion of a hand-marked paper ballot or a ballot-marking device ballot and indicate where you have a scanner being used, simply because the scanner could be giving you the wrong result.

THE COURT: All right. Thank you. I think that Mr. Cross had a follow-up question.

MR. CROSS: So, Dr. Gilbert, have you had a chance to take a look at the new rule that was provided this morning on recount tabulation procedures?

DR. GILBERT: I have not, unfortunately.

MR. CROSS: Just briefly on this, did you hear the way it was described what they call the mini audit where they take -- they look at 75 ballots that are marked on election day, 25 absentee, and they run those back through the scanners to see if the scanner results are accurate? Did you follow that earlier?

DR. GILBERT: Yes, I did.

MR. CROSS: It is fair to say that that is -- what they are describing in your line of work would be called logic and accuracy testing; is that right?

DR. GILBERT: I have seen it used that way. I have

1 seen that term used that way. 2 MR. CROSS: One other point. In Paragraph 35 in your declaration, you write both are auditable. Both BMD and 3 4 hand-marked paper ballot voting systems can audited by an RLA 5 or a recount to confirm the tallies of the optical scanners. 6 And then you explain, since the human readable record controls 7 under either system, an audit or recount can reveal any issues 8 with the tally. You go on from there. 9 Do you recall this, or do you have this in front of 10 you? I recall it. 11 DR. GILBERT: 12 MR. CROSS: So do I understand correctly at the time 13 of your declaration you were under the understanding that the 14 human readable record would control in a recount in Georgia? 15 That is what this says; right? 16 DR. GILBERT: Yes. 17 MR. CROSS: Two last questions: If you have got 18 Paragraph 39(d), it relates to a similar point we just covered 19 where you wrote, some will argue that the QR code is not human 20 readable. Therefore, this is a problem. You go on, this is 21 only an issue if the QR code is the ballot of record and there 2.2 is no RLA and/or preelection testing. 23 Do you see that? 24 DR. GILBERT: Yes. 25 MR. CROSS: When you wrote this, were you under the

```
1
     understanding that the state would have risk-limiting audits in
 2
    place for the elections this year?
 3
               DR. GILBERT: No.
                                  I wrote that with the
 4
    understanding that there would be some mechanism to audit.
                                                                 So
 5
     I didn't know exactly what form, a risk-limiting audit or what
 6
     name they would use or how they would do it.
 7
               MR. CROSS: But you referenced risk-limiting audits
 8
    here; right?
 9
               DR. GILBERT: I do reference risk-limiting audits.
10
               MR. CROSS: Last question: Logic and accuracy
     testing -- malware can be designed such that the malware will
11
12
     not be detected during logic and accuracy testing? You have
13
     seen that; right?
14
               DR. GILBERT: I have seen that occur in some tests.
15
     It is not my opinion that it is impossible to detect.
16
               MR. CROSS: But you have seen it occur?
17
               DR. GILBERT: I have not seen it occur.
                                                        I have seen
18
     it reported. But, again, it is not my opinion that it is
19
     impossible to detect.
20
               MR. CROSS: Okay. Thank you.
21
                           Couple of follow-up questions, Your
               MR. BROWN:
2.2
             This is Bruce Brown.
23
               Would you agree that a proper audit, including a
     risk-limiting audit, requires a reliable source record?
24
25
               DR. GILBERT: A reliable source record?
                                                        I'm not sure
```

1	I understand what that means.
2	MR. BROWN: Would you agree that an audit, including
3	a risk-limiting audit, is based upon a record and those records
4	need to be reliable for the audit to be effective?
5	DR. GILBERT: I still don't understand. What is the
6	record? What is the record?
7	MR. BROWN: A record of a vote let's say.
8	DR. GILBERT: I'm having a hard time I mean, I'm
9	not understanding your question. I'm sorry
10	MR. BROWN: I didn't mean it to be a hard question.
11	Let me ask it a different way.
12	The Dominion BMD system that we are here about, the
13	audits with respect to that system assume that the output of
14	the ballot-marking device is correct; correct?
15	DR. GILBERT: Assume that the output is correct?
16	Yes. Yes.
17	MR. BROWN: So you are starting from the assumption,
18	not the proof, that the vote that you are auditing is correct;
19	right?
20	MR. MILLER: Your Honor, at this point I think we're
21	venturing into the territory that Mr. Rayburn was testifying on
22	regarding risk-limiting audit process. So
23	THE COURT: Let him answer, and then we'll just
24	DR. GILBERT: Can you repeat that question again?
25	MR. BROWN: Sure. You were assuming that the output

1 of the BMD is correct? And then based upon that assumption, 2 you are doing your audit; right? I don't know what you mean by assuming 3 DR. GILBERT: 4 that the output is correct. But the understanding is that a 5 ballot is being produced under private conditions by a voter and that ballot is then moved into the scanner or the next 6 7 process of the election. 8 THE COURT: All right. You know, the thing is my 9 questions really for Dr. Gilbert were really just trying to understand the basis of his opinion. And I'm really not trying 10 11 to explore it much further than the very most basic issue. 12 So I think that is sufficient. Thank you. 13 Thank you, Dr. Gilbert. 14 DR. GILBERT: Thank you. 15 THE COURT: So let me just ask counsel a question. Dr. Gilbert's affidavit says that if the QR codes are 16 17 inconsistent with the human readable portion of the ballot this 18 will be detected during the risk-limiting audit and may signal a full manual recount. 19 20 I don't see a provision for a -- in your new proposed 21 regulation for an audit to trigger a full manual recount. 22 understand that you talked about --(There was a brief pause in the proceedings.) 23 24 MR. TYSON: I'm sorry. Your Honor, I was getting 25 clarity on this point so we can answer the question.

So, Your Honor, that would be part of an audit rule of what the effect would be. A risk-limiting audit, if there are -- if you can't make a reconciliation, it can lead up to a full manual recount by design. So we would expect that what would happen if you discover a discrepancy is going to be covered by the auditing rules because we'll have to make a decision at that point whether you are filing an election contest, whether there was an additional full manual recount from that.

MR. CROSS: Can I ask a follow-up? It is a narrow -THE COURT: I want to just make sure that they fully
answered.

MR. CROSS: Sure. I'm sorry.

MR. TYSON: I think -- Mr. Russo, do you want to address that?

MR. RUSSO: It depends on if it is a pre- or post-certification audit and then the timing of when you can under the law either challenge an election and file an election contest, which would then maybe trigger a court order to do a manual recount under the rule, or whether, as Mr. Tyson was saying, the audit rule then in and of itself triggers a recount.

MR. TYSON: I think the pre- and post-certification point is important because it is part of the design. If you are doing your audit before you certify, the whole structure of

the election law is different than post-certification.

And so a post-certification audit looking at other issues and looking more broadly at the system has different implications that would have to be covered.

So, again, all that is going to go into the design of what we do when we -- when we go through and audit these paper ballots.

THE COURT: And we don't have any information at this point about how long it would take or how -- and I don't know how that interfaces with certification in the sense of I cannot -- it has been a while since I was involved in an election challenge. So I can't remember what the number of days is. But it is not forever that you have.

MR. TYSON: I believe it is five days after certification, Your Honor. Yes.

THE COURT: So this is a short period of time in order to know that things have gone awry. And if it is post — if you were — so if you only get the results a month later, it can't really result in a recount?

MR. TYSON: Yes, Your Honor. One other provision I have been reminded of that is in the new law is the Secretary does have authority to suspend certification to conduct an audit. There can be a review there if there are discrepancies found.

There are also other remedies under Georgia law. If

1 you want to challenge an office holder's right to hold an 2 office after the fact, there's a variety of options available beyond just what we can kind of think in terms of the initial 3 4 recount certification and election contest provisions. 5 MR. CROSS: Do I understand correctly this means 6 that, if one of the pilot audits were to find a discrepancy 7 that would suggest the results of that particular election are 8 unreliable, the rules as written would prohibit any kind of a 9 recount? Is that right? 10 MR. TYSON: I don't think we have an audit rule that 11 would specify. So you are saying it prohibits it. 12 think there is a prohibition on that. I think that is -- there 13 is no provision for that. 14

MR. CROSS: I thought we --

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MR. TYSON: You file a contest. I mean, that is what you do if you find in a pilot audit something was wrong. would be a good basis for a contest, most likely.

MR. CROSS: I thought we covered earlier that in 2(a)(1) of the recount rule prohibits recounts unless two things are satisfied and an audit is not one of them.

THE COURT: That is what I was asking about.

MR. CROSS: That is what I thought. I thought that was the answer. But now that is why I wanted to confirm because it seems like they have a different view.

MR. MILLER: Your Honor, we can clarify. Mr. Tyson

is pulling out the statute. But I seem to recall under the recount statute that a county election superintendent can also call a recount under certain circumstances.

THE COURT: There is some music. They must be saying, it is Friday. Why are you here?

What section do you want to point me to?

MR. TYSON: I'm sorry, Your Honor. I'm looking at 495 trying to find this in the statute -- the recount statute.

Yes, Your Honor. 495(a) --

THE COURT: So 21-2-495(a).

MR. TYSON: The superintendent may, either on his or her own motion or upon a petition, order the recount -- let's see. I'm sorry -- in which it shall appear that a discrepancy or error, although not apparent on the face of the returns, has been made. Such recount may be held at any time prior to certification.

MR. CROSS: I think the confusion, Your Honor -- and it may have been my fault. And the way I phrased it is: I understand there are certain rules that trigger recounts. But the only way to get a manual recount, which would address the concerns we have, is you have to -- you have to satisfy one of these circumstances under 2(a) in the recount rule.

And so it either fails the logic and accuracy testing in Subsection (c) or a court has to order it. So that means if the audit found that an election result was wrong or

unreliable, you still would have no manual recount.

MR. RUSSO: I mean, I would say that that is what -if I had a client who had lost and we had found an issue with
the results as a result of a post-election audit, you would
file an election challenge and ask the court for an order --

THE COURT: Post-certification.

MR. RUSSO: -- for a manual recount. That is right.

MR. CROSS: Post-certification?

THE COURT: But -- and what are the limits on doing that under Georgia law post-certification? I mean, you might not have the audit results obviously in five days. That is the only concern.

MR. RUSSO: I don't want to get ahead of myself here.

But I think there's a precertification audit that was -
precertification tabulation audit in your first question that

Mr. Rayburn was speaking to earlier.

So I guess there is some additional policy pieces here that the state is still finishing with the audit process.

But I don't think it would prohibit a candidate from filing a challenge within the time frame under the law, even if the audit hadn't been completed. You could still file a challenge.

MR. TYSON: And, Your Honor, under 21-2-498(b) that you referenced, the audits that have to take place starting no later than November 2020 are required to be precertification audits. So you would get the results of the audit prior to

certification. Certification is the triggering point for the time of filing an election contest.

So a candidate would have more than enough time to

learn the results of the audit and then file an election contest and seek a court order seeking a manual recount, if they chose to do so.

MR. CROSS: That leaves two problems, Your Honor.

THE COURT: Let me just absorb what --

MR. CROSS: Okay.

THE COURT: -- what Mr. Tyson has said first. All

11 right?

(There was a brief pause in the proceedings.)

THE COURT: Okay. Go ahead.

MR. CROSS: Two problems, Your Honor. One, we have elections that are ongoing that have audits going with them to some limited degree, including a presidential primary.

So we would be in a situation where, if there was an audit of the presidential primary in some particular county, the only recourse if the audit shows those election results are unreliable is -- which gets to my second point -- a pretty draconian measure.

As I understand it, election challenges have very strict limits. And so we're basically saying the only way to have a reliable election for a presidential primary is you've got the nuclear option if an audit finds that it is unreliable

instead of doing it precertification.

And so that is the essential premise of our concern about this case.

THE COURT: Well, your case is more than about the presidential primary.

MR. CROSS: Oh, no. Agreed. I'm just saying --

MR. RUSSO: Your Honor, I just point out that the presidential preference primary is not really an election. It is a fancy poll so that both political parties can figure out how to apportion delegates at a convention. So I don't know if --

MR. CROSS: I suspect voters feel very strongly -
THE COURT: I am sure that they do. But I am looking at the long run.

MR. CROSS: Understood. But that is the challenge we have, Your Honor, is we keep looking at the long run and then we get up to that point and we find it is too late.

And we don't have audit rules even now. They have got an expert whose premise for what he is saying are risk-limiting audits. So I just feel like we just keep chasing this dog and that dog is always ahead of us and we're never going to get there. And I don't know how to bring us to a close.

THE COURT: Well, you know, the reality is though it doesn't mean the state couldn't tweak that rule. All right.

This is their rule right now. It may be a little bit -- there has been some improvement. It might be defective for the reasons we have flagged about this particular issue. It doesn't mean it is not within the authority of the board to change it too. Obviously, it is.

MR. CROSS: No.

THE COURT: I understand your point. Your point is taken, and I understand your point.

MR. CROSS: And for what it is worth, Your Honor,
Mr. Russo may tell me I am wrong. But I suspect it is not a
coincidence that we got these changes today before this
hearing. So we do -- this is why we think Your Honor has to be
involved.

THE COURT: Well, I understand that is your view.

And I appreciate the -- probably we could have been a little -in a little bit of a different state in terms of moving
efficiently if we had seen it beforehand. But it is what it
is. And I appreciate their bringing it.

MR. RUSSO: Your Honor, it was just posted today. I was not at the meeting. I suspect they had plenty of folks at the meeting last week, given the affidavits that were attached to their notice filing yesterday. But today is when it was posted, and we didn't want to give you a Word document.

THE COURT: I appreciate that. I did try -- the minutes don't allow you to so simply figure out what happened.

I did go and look at whatever I could on the website. I saw what was adopted. But I didn't see the proposal.

MR. RUSSO: I appreciate that. Given what Mr. Cross said, I just didn't want you to think we were withholding something.

MR. CROSS: No. I'm not suggesting anything nefarious, just to be clear. My only point is that I think this case has spurred certain action that I agree has been progressive. That was my only point.

I'm not suggesting this was nefarious. I like to think that they are reacting to this case in positive ways. think there is a lot more that needs to happen. But I'm not suggesting this is insidious. I'm just saying Your Honor's involvement, we think, has brought about some progress. And that is my only point.

THE COURT: Good. Thank you. It is 10 of 5:00. I think I have learned a lot. I had some questions answered. And I appreciate it. I appreciate that people turned heaven and earth around in their schedules to get here. And I appreciate the people on the phone also had to deal with all of the peculiarities of listening to a lot of going back and forth on the phone. And that is not necessarily the most fascinating thing in the world, especially when you are hearing it disconnected.

And, Mr. McGuire, if you are in Seattle or you are

1	back at home, I wish you well.
2	I wish everyone well. And I think that is unless
3	somebody has something for the good of the order that they
4	desperately need to bring to my attention, I'm going to
5	adjourn.
6	All right. There was the signal.
7	(The proceedings were thereby concluded at 4:50
8	P.M.)
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1	CERTIFICATE
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3	UNITED STATES OF AMERICA
4	NORTHERN DISTRICT OF GEORGIA
5	
6	I, SHANNON R. WELCH, RMR, CRR, Official Court Reporter of
7	the United States District Court, for the Northern District of
8	Georgia, Atlanta Division, do hereby certify that the foregoing
9	106 pages constitute a true transcript of proceedings had
10	before the said Court, held in the City of Atlanta, Georgia, in
11	the matter therein stated.
12	In testimony whereof, I hereunto set my hand on this, the
13	9th day of March, 2020.
14	
15	
16	
17	SHANNON R. WELCH, RMR, CRR
18	OFFICIAL COURT REPORTER UNITED STATES DISTRICT COURT
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